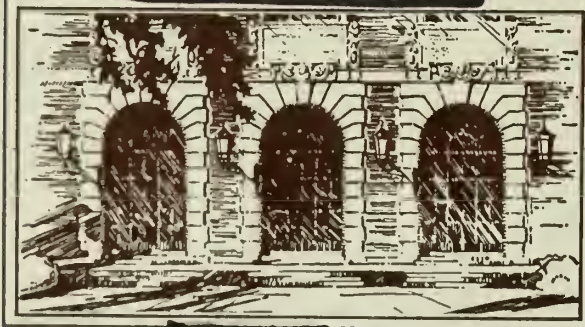


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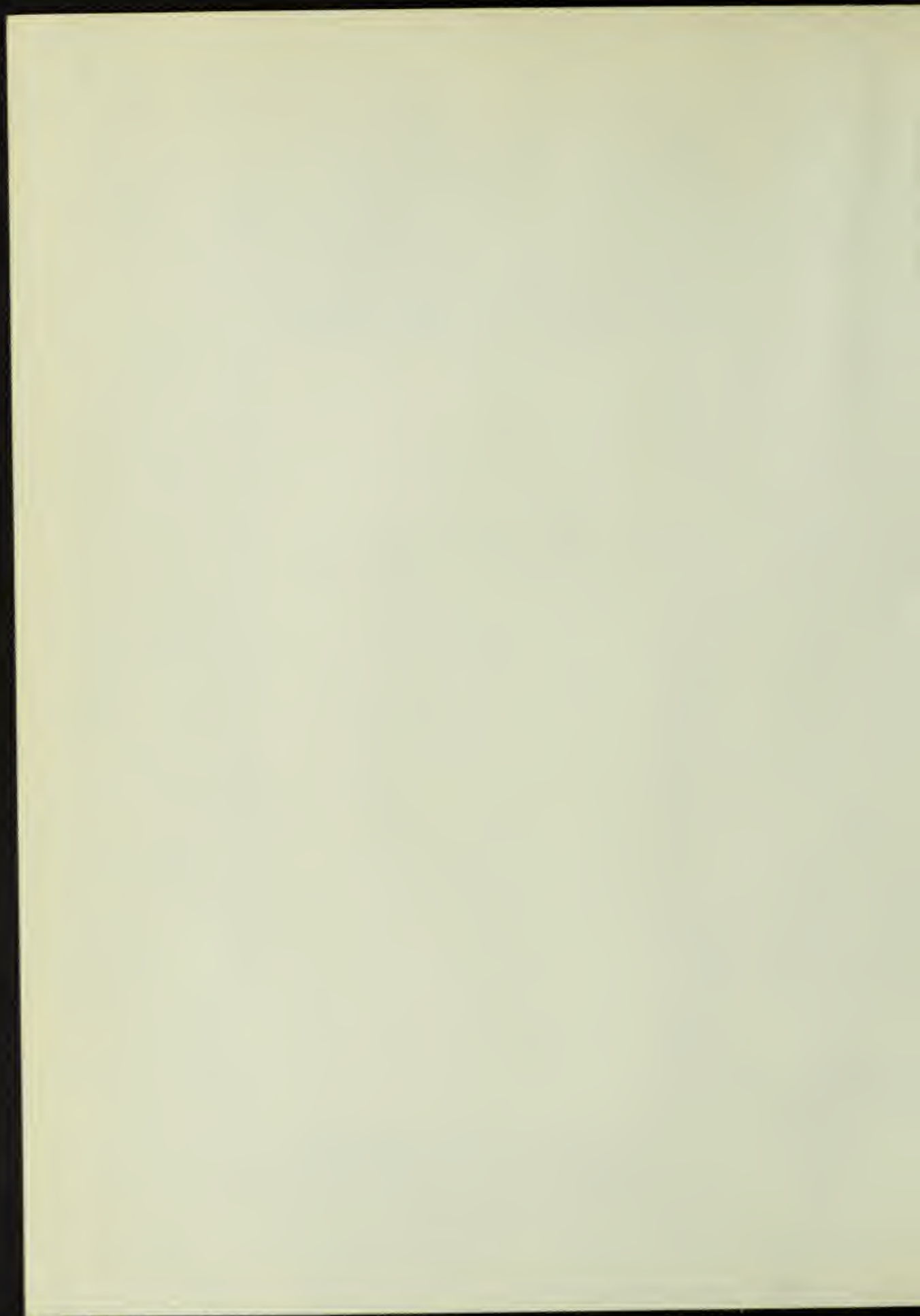


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INCOME

BACKGROUND

Yung-Ping Chen, Ph.D.

ISSUES

THE TECHNICAL COMMITTEE ON INCOME
with the collaboration of the author

Roger F. Murray, Chairman

White House Conference on Aging
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1971 WHITE HOUSE CONFERENCE ON AGING¹²⁶

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Yung-Ping Chen, Ph.D.

ISSUES

THE TECHNICAL COMMITTEE ON INCOME
with the collaboration of the author

Roger F. Murray, Chairman

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FOREWORD

This paper on Income provides information for the use of leaders concerned with the development of proposals and recommendations for national policy consideration and of delegates to the National White House Conference on Aging to be held in Washington, D.C., in November-December 1971.

The first four sections of the paper discuss: the income needs of the elderly; goals proposed by previous conferences and groups; information on knowledge now available relative to the present income status of older people; and vital gaps in this area. These sections of the paper were prepared for the Conference by Yung-Ping Chen, Ph.D., Associate Professor of Economics, University of California at Los Angeles, with guidance from the Technical Committee on Income.

The fifth section of the paper discusses several major issues relevant to the income needs of the elderly. The issues were formulated by the Technical Committee on Income for consideration by participants in White House Conferences at all levels and by concerned national organizations. The purpose of the issues is to focus discussion on the development of recommendations looking toward the adoption of national policies aimed at meeting the income needs of the older population. The proposals and recommendations developed in Community and State White House Conferences and by national organizations will provide the grist for the use of the delegates to the national Conference in their effort to formulate a National Policy for Aging.

Arthur S. Flemming
Chairman, National Advisory Committee
for the 1971 White House Conference
on Aging

John B. Martin
Special Assistant to the President
for the Aging and Director of the
1971 White House Conference on Aging



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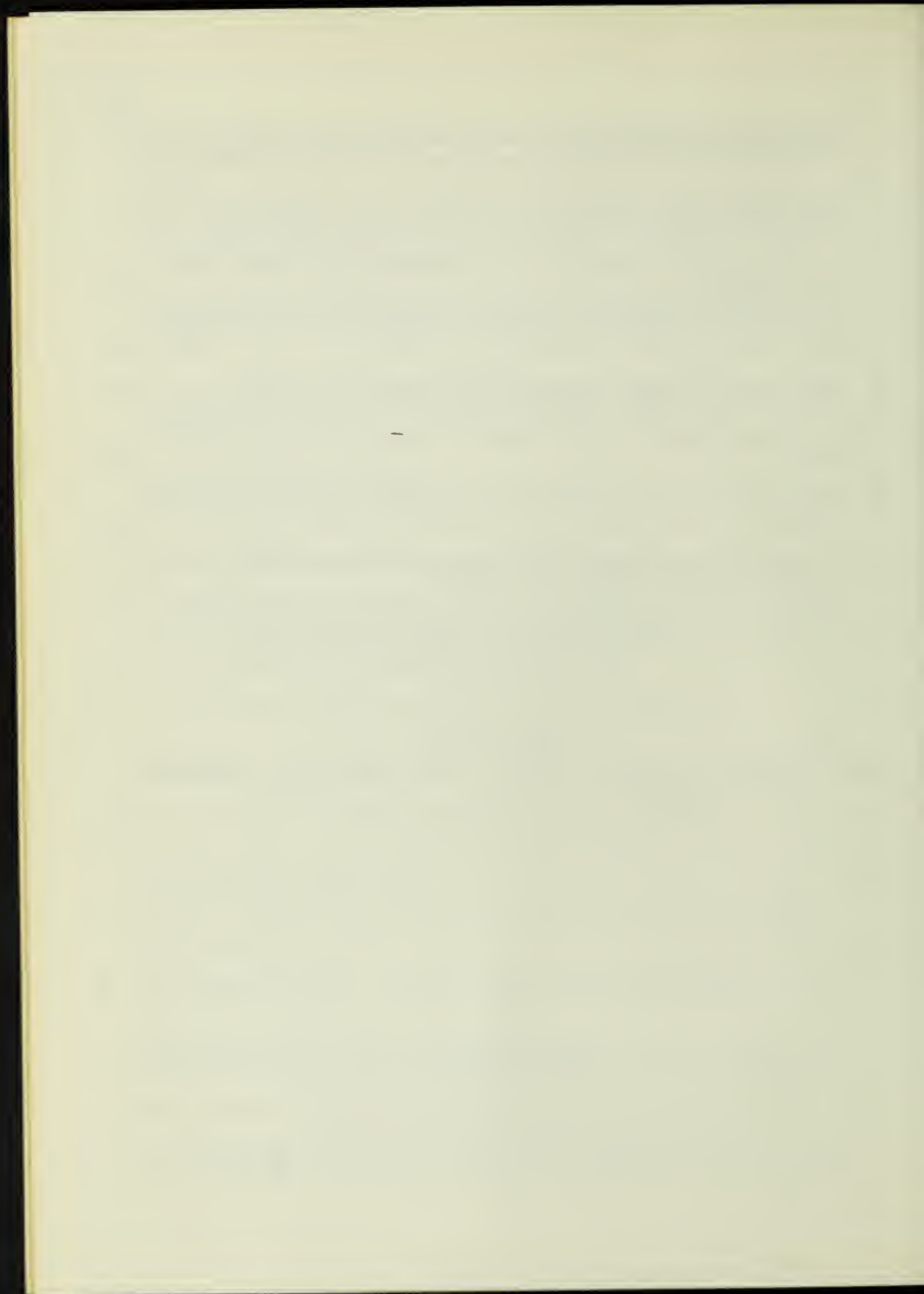
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I. INTRODUCTION—THE NEED

A. INCOME PROBLEMS IN OLD AGE

It is widely recognized that income is one of the most powerful forces which affect the life of a person or that of a family. In order to achieve a sense of economic and psychological well-being, a certain adequate level of income as well as the assurance that such income will continue are of fundamental concern to everyone. In short, adequacy and security of income are among the basic preconditions of a person's or a family's welfare. This is not to say that income is the overriding issue in a person's life—for it is not. But it is at least a prime mover in the marketplace, a force that affects the young and old alike. Moreover, the collective welfare of society would be enhanced when adequate and secure income is available to all its members. Society's welfare could be enhanced by the increased harmony among people through reduction of discontent and fear, alienation, and antisocial behavior. Societal welfare could also be enhanced by the reduced incidence of mental and physical health problems which most probably would result from improved conditions of life.

Many needs of the elderly and many problems of isolation and unhappiness facing the elderly may be traced to the inadequacy and insecurity of their income. Even when such hardships are not directly caused by a lack of income, insufficient financial resources most certainly would aggravate the discomfort and misery that are visited upon the old. Adequate and secure retirement income may well be a very significant preventive or at least ameliorative factor.

When income is secure and adequate, any person, young or old, may compete in the marketplace for food, shelter, and clothing, for medical and educational attention and the like, because the satisfaction of such basic human wants indeed depends on the command of dollar votes. Further, when such income is available, there would be less need for public policy to provide alternate markets through which special prices, free services, and facilities are made available. However, in a society which is making progress toward reducing economic poverty (defined in money terms, as opposed to cultural, moral, spiritual poverty; hereafter referred to as "poverty"), a strategy to bolster the income of the poor would be strengthened when it includes efforts to improve the availability and quality of public and private services. Such efforts would enable the underprivileged to gain better information and skill, and more ready access to the basic amenities of life. Even though income inadequacy is defined in money terms, it does not necessarily follow that all problems associated with inadequate income can be solved simply by giving people more money. It is debatable, for example, whether increases in income without improvements in the availability and quality of facilities in health care, housing, transportation, and other public and private services would permit the elderly to fully participate in family and community life. The supplementary role of services and facilities is particularly significant in the short run. Other background papers will deal with these and other needs areas.

While there is little dispute that income adequacy and income security are universally desirable, there is no consensus on what level of income is adequate and what degree of protection is secure. A solution to the income problem involves a host of issues including the various demands on income. Income need is a relative and not an absolute concept; there is no single measurable level of income that may be regarded as fulfilling all income needs of every person. Even minimum subsistence levels of income differ according to the country or community in which a person lives. Of course, statistically, it may not be too difficult to suggest several income levels that meet the basic needs in life, such as poverty "threshold"

incomes computed in accordance with age, family size, and the like (See Table 1.). Although consumer budgets have been estimated for one purpose or another, they can only be used as general reference points. Substantial variations exist among persons insofar as consumption patterns and expectation levels are concerned. Not only do standard budget figures vary among different places of residence (North or South, metropolitan or nonmetropolitan, for example), but wide differences are also observed between standard figures and actual expenditures by persons and by families (See Chart 1. and Table 2.). Medical care expenditures, for example, can be variable among families as well as for the same family over time, so variable, in fact, as to render budget allowances unrealistic.

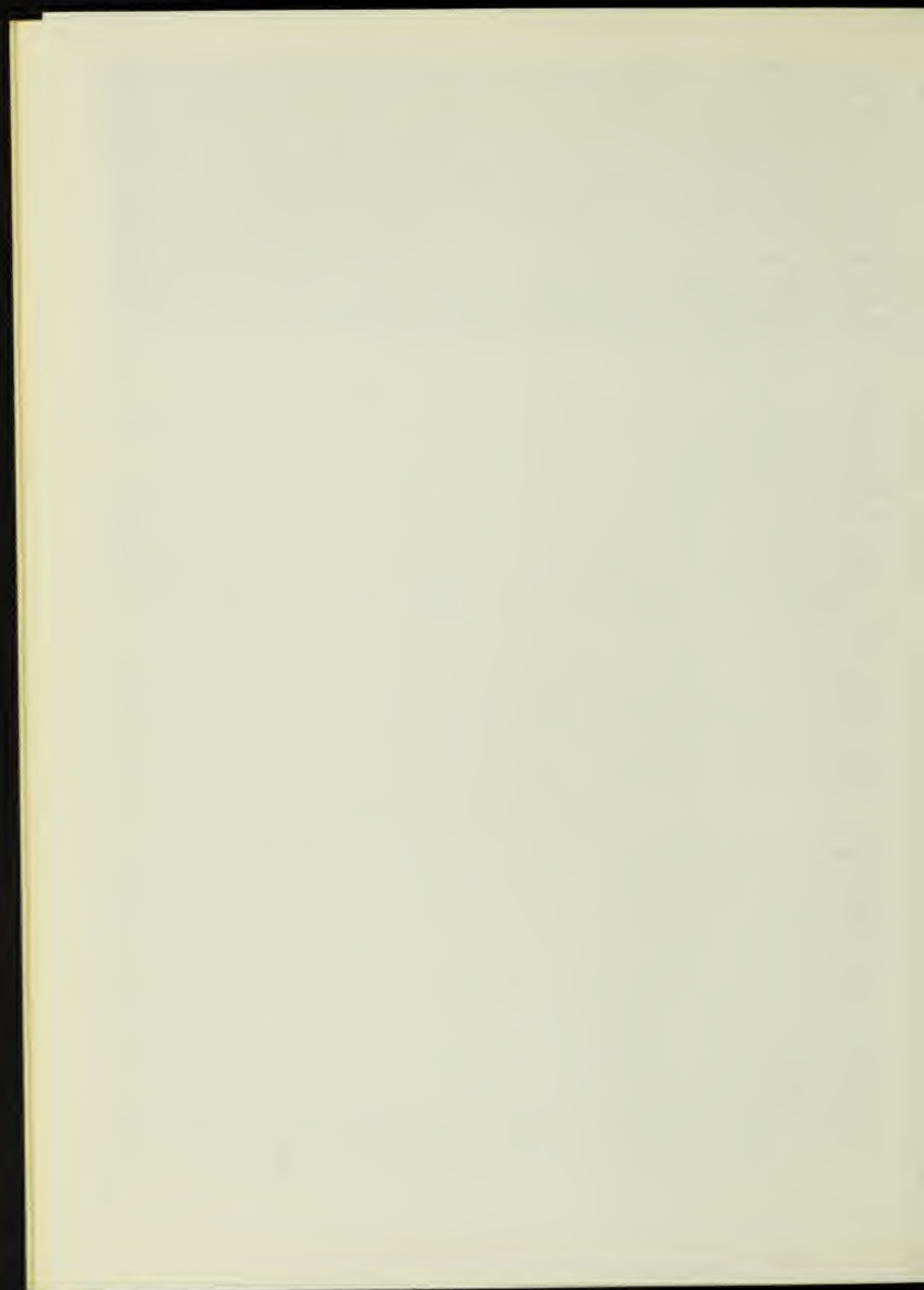
Estimates of adequacy of income based on poverty, near-poverty, or various other standards of living may be misleading from yet another point of view. For the aged, these estimates may fall far short of the standard of living to which they have become accustomed prior to retirement. And unless they are psychologically prepared to accept a lower (or much lower) standard, a serious loss of morale will ensue. Thus, while a budget may cover the physical requirements of a person, it may not provide much psychological sustenance. Of course, not everyone is necessarily entitled to obtain what he "expects." However, it seems appropriate to suggest that financial and other mechanisms should be made available so that those persons who desire and choose to do so may have a chance to realize their expectations.

There is no intention here to question the importance of estimating budgets for various standards of living. In any attempt to abolish poverty—for example, through a program providing cash income to the poor—there clearly is a need for an estimate, albeit rough, of what the contemporary standards are. Rather, the intention is to suggest that in considering income adequacy in old age, close attention should be paid to the relationship between preretirement and postretirement income. **In an economic system in which personal incentive and responsibility are rewarded differentially in general accordance with individual contributions, it follows that the preservation of these differentials in retirement income is desirable.**

Another important issue that affects retirement income also deserves close attention. While income may be adequate at the time of retirement, it may become inadequate as time passes (Epstein, 1963; Merriam, 1966; Kreps and Blackburn, 1967). This unfavorable development may occur for three major reasons. First, assuming a relatively fixed income, its purchasing power will decline with price inflation. Second, assuming improvement in the living standard of the working population, the living standard of the retired—as supported by their relatively fixed income—will fall behind that of the working (nonaged) population, leading to feelings of "relative deprivation and insecurity" in terms of contemporary living standards of the society at large. Third, to the extent to which assets are drawn upon for supplementation—interest, dividend, and rental income will be reduced over time.

There is little doubt that this society has the material resources to abolish poverty or eliminate absolute deprivation, especially if such a goal is to be achieved over a reasonable period of time (say, by the year 1976 or by the end of this decade). However, the need to devise mechanisms that sustain personal initiative and motivation (during working years) cannot be overemphasized. This twin goal of maintaining individual contribution (while working) and collective effectiveness (of the society as a whole) concerns income differentials above the minimum poverty threshold level. That is, in order to sustain productivity as well as morale, it would seem necessary that postretirement income hold a "reasonable relationship" to preretirement income. If income declines severely for a large number of people because of retirement, this will affect the spirit of the old, who then feel that "relative deprivation or insecurity" referred to above. But it might also adversely affect the incentive of the young, who face such uninviting prospects later on. Some may argue that the young do not really think ahead toward retirement, or that the young may give some thought to retirement but they do not care about what might happen in the distant future. It is possible also that there is a great diversity in personal preferences in this matter. This problem will be explored in Section III.A. Retirement Income Adequacy and the American Standard of Living.

In summary, income is one of the extremely important determinants of an individual's sense of well-being. A solution to the income problem can bring with it solutions to many other problems of old age, such as social isolation in the form of rolelessness, and psychological deprivation in terms of worthlessness. But in seeking to solve the income problem, adequacy and security of income both should be considered, with close attention paid to absolute or minimum as well as relative adequacy of income during the entire period of retirement. To use an analogy, the ladder of human success and fulfillment should rest on a firm basis, but it should rise at a reasonable angle so that it can be mounted with confidence. Although the degree of that angle can be argued, there can be no question that the eradication of poverty or destitution will provide a firm foundation for the ladder (Brown, 1970). It might be added that this ladder analogy is used in reference to preretirement achievement which forms a basis for postretirement income. The analogy does not imply, however, that income is expected to continue to rise after retirement and at the same degree as before, but that the goal is a reasonable relationship between the two income levels.



II. LONG-RANGE GOALS

Title 1 of the Older Americans Act, Public Law 89-73 (U.S. Department of Health, Education, and Welfare, 1970), lists ten objectives in which Congress recognized the general responsibility of all levels of government toward the well-being of older members of our society. The first objective enunciated is "[A]n adequate income in retirement in accordance with the American standard of living." The Act became law on July 14, 1965. What level of income is adequate and what is the American standard of living, however, are not specified.

Before and since passage of the 1965 Act, various commissions, conferences, task forces, and other bodies concerned with the aging and the aged have unfailingly placed emphasis on the subject of income. In the legislation calling for the 1961 White House Conference on Aging, Congress intended that recommendations and plans be developed by all levels of government and their citizens to enable, among other objectives, "retired persons to enjoy incomes sufficient for health and for participation in family and community life as self-respecting citizens." In the same Act it declared the policy of Congress, that "in all programs developed there should be emphasis upon the right and obligation of older persons to free choice and self-help in planning their own future."

The report of the most recent Presidential Task Force on the Aging *Toward a Brighter Future for the Elderly* (1970) includes several recommendations which specifically deal with income problems of the aged. Two recommendations are concerned with bringing all aged up to the poverty line as established by the Government, another two specifically deal with possible means of strengthening private pension plans as a source of retirement income, and still another two direct their attention to improving the Social Security system as a retirement income mechanism. There is, also, a recommendation calling for a comprehensive review of income needs of the aged with a view toward creating a new or revised economic security system for the elderly before the end of the decade. The naming of the decade of the 1970's for such an achievement is of far-reaching significance.

In a recent report, the U.S. Senate Special Committee on Aging (1970c) emphatically states that "[O]ur Nation, during this thirty-fifth anniversary of the Social Security program, has not yet resolved retirement income problems which severely damage the economic status, morale, and even the health of millions of Americans, including many well above the poverty line," (p. 1) and "[I]t is within the power of this Nation, . . . , to make the 1970's the decade in which this Nation will achieve its declared goal of 'an adequate income in retirement in accordance with the American standard of living.' " (p. 2) The Committee feels "an obligation to declare that the retirement income *problem* in the United States had become a retirement income *crisis*" and the Committee states that "...action *must* be taken early in the 1970's because the problem is so grave" (p. 2) (emphasis in original).

According to the minority views of the same report, "While many needs of older persons—physiological, emotional, psychological, and spiritual—must be given recognition, the number one priority is to achieve decent living standards for all older citizens. . . . The fact remains, however, that the chief problem is individual income" (p. 193).

The long-range goals may be summarized as abolition of poverty, and the provision of income adequacy and security, consistent with individual and collective responsibility conforming with the American standard of living. For only when income of the aged is adequate and secure may the aged be expected to lead meaningful, self-respecting, and independent lives. More broadly speaking, public and private policy for assuring adequate retirement income should be concerned with *all* people, for only when economic and social circumstances make it possible for people to earn and save while they are young may there be

a wide range of choices open to them when they become old. From a policy point of view, the critical question is how to best achieve these goals. This question will be dealt with in Section V. Issues. In designing policy measures, it is important to bear in mind that the aged, like the nonaged, are a heterogeneous group of individuals. It is also important to draw a distinction between the present aged and the future aged, because those now old have problems requiring immediate solutions and have little time to wait.

In Section III. Knowledge Available, which follows, retirement income adequacy and the American standard of living will be discussed first, because these remain essentially undefined although forming the goals which public and private policies are designed to attain.

III. KNOWLEDGE AVAILABLE

A. RETIREMENT INCOME ADEQUACY AND THE AMERICAN STANDARD OF LIVING

Discussions of retirement income are replete with such expressions as "abolishing poverty," "sufficient income to live on a standard of health, decency, and comfort," "enough income to provide a living with a certain amount of dignity," and the like. These concepts—decency, comfort, dignity, and so forth—can mean very different things to different persons. Even the condition of poverty holds different meanings for people with divergent viewpoints. As a matter of fact, if poverty is defined in a relative sense—for example, in terms of the lowest 10, 15, or 20 percent of the income distribution—obviously it is impossible to abolish because such a segment of income always exists statistically.

It was stated in Section II. Long-Range Goals, that neither the adequate level of income nor the American standard of living are specified in public pronouncements on the goal of retirement income. This observation does not carry with it criticisms for the lack of specification. What it does reflect is that income adequacy and the American standard of living are ideals that are subject to various interpretations. Income need is a relative and not an absolute concept, and therefore one person's adequacy may be another person's inadequacy (Bok, 1967; Schulz, 1969). Likewise, the American standard of living is a condition of life that is changing with time; the standard of living in the 1970's is certainly going to be different from that in the 1960's or in earlier decades. Although there may never be any consensus on income adequacy and on the American standard of living, some operationally useful definitions are required, if the goal on retirement income as stated in the Older Americans Act is to be translated into reality. What follows is an attempt to provide a basis for defining the contents of this goal.

1. Definitions of Adequacy

Adequacy of income might be construed as those levels of income that would avoid various degrees of poverty (thus eliminating "absolute deprivation") according to the income benchmarks defined by the Social Security Administration (See Appendix A.). Or it might be interpreted as those levels of income that would meet other standards of living, such as the various standard budgets estimated by the Bureau of Labor Statistics (See Appendix B.). Since income adequacy is a relative notion with social, psychological, as well as economic dimension, adequate retirement income might be expected to bear a "reasonable relationship" to income before retirement in order to avoid feelings of "relative deprivation or insecurity." A level of income that is adequate at the start of retirement, however, may become inadequate if its purchasing power declines with inflation. An adequate income when retirement begins may also become inadequate if economic growth raises the standard of living of the working population in general but offers no improvements for the retired. In both instances, feelings of relative deprivation or insecurity would result. Again we see that income adequacy is a relative and a dynamic rather than an absolute and a static concept; income security as discussed above is a necessary ingredient of income adequacy. As a convenient shorthand expression for income adequacy and income security, "income sufficiency" may be used. While income sufficiency may be hailed as an ideal objective, there is no consensus on what level of income constitutes adequacy and what level of protection of that income affords security.

As pointed out earlier, "American standard of living," too, is a relative and a dynamic rather than an absolute and a static notion. Perceptions of what the American standard of living is likewise vary among individuals. This is particularly true when this standard of living is discussed in the context of assuring sufficient income for the retired, because at least part of that assurance comes from transferring income from the working to the retired.

One of the first important questions is what level of income may be considered as providing "minimum or absolute adequacy." There seems to exist a wide agreement that a poverty-level income is inconsistent with the so-called American standard of living, judging from public and private discussions and programs designed to lift people out of poverty. As a working definition of income for the aged, in round numbers, the 1969 poverty threshold incomes of \$2,200 for a couple and \$1,750 for unmarried persons may be taken to approximate those levels of income required for minimum physical subsistence (See Table 1.). As observed earlier, differences among people in their views of the world include varying opinions on what is the poverty level of income. As a response to the interest in considering alternative poverty levels, recently the Census Bureau has tabulated data on persons with incomes 25 percent below and above the generally used poverty thresholds such as the figures on aged couples and aged single persons cited above. Data on these two alternate poverty levels (below 75 percent of the poverty level and below 125 percent of the poverty level) have not been officially published as yet. They should be available shortly. (See Appendix A. for the derivation of the poverty index.)

Although it is comparatively easier to suggest a minimum adequacy of income that might eliminate "absolute deprivation," it is far more difficult to suggest what level of income provides psychological sustenance beyond the minimum physical subsistence—a level of income necessary to avoid "relative deprivation." The expression "reasonable relationship" has been used in the previous mention of postretirement to preretirement income and of a living standard of the retired as compared with that of the general working population. What is reasonable, however, is not capable of objective, quantifiable measurement, and a subjective notion of reasonableness reminds us once again that one person's reasonable relationship may be another person's unreasonable relationship.

The "relative adequacy" level of income is a highly variable and debatable notion: it depends upon the preferences of individuals with respect to their lifetime allocation of income and consumption. Some prefer to consume more when they are young and less when they become old, while others would want to moderate their consumption in early stages of life in preparation for more income in retirement. In a society in which there is a strong belief in personal preferences and a heavy reliance on individual initiatives, it may be argued that choices about distribution of income and expenditures over a life cycle should be left to the individual. However, the ideal of maintaining as much freedom of choice as possible in the management of one's financial and other matters may never become a reality for some people, either because they may suffer from miscalculations or because they may fall victim to forces beyond their control. A compromise between these two points of view may be acceptable to society at large.

Such an approach would call for a compulsory public retirement program to provide income *up to a level*. Beyond that, individuals would be expected to provide for their own. This is in fact the system of divided responsibility for providing retirement income that exists today in this country. However, this crucial question remains: What level of income is a compulsory public retirement program designed to provide? Is it the "minimum adequacy," designed for the avoidance of poverty? Surely a level of income below the poverty line is contradictory to the American standard of living; but does the American standard *merely* call for the abolition of poverty or absolute deprivation?

It seems equally clear that the American standard of living cannot be based on what the most fortunate members of society may attain (maximum adequacy). Thus, the objective of assuring provision of "an adequate and secure retirement income in accordance with the American standard of living" may imply a system of retirement income provision, under which

the retired will be assured of (1) "minimum adequacy" of income which is guaranteed by society, (2) a "relative adequacy" level of income to be generated from group plans (both government and nongovernment) and, (3) a "maximum adequacy" level of income to be determined by and planned for the individual himself. One major elderly group, for example, has proposed major revision of the Social Security system based upon the "relative adequacy" concept (Nash, 1970).

Discussions of "reasonable relationship" between preretirement and postretirement income have been conducted for many years, but they have dealt usually with the relationship between earnings covered by a Social Security program and the benefit payments from it (a "replacement rate," in short, which does not refer to relationships between the *total income* before and after retirement). For many years a commonly quoted ideal replacement rate for the "average" worker covered by a social insurance program has been at least 40-50 percent of earnings (Horlick, 1970). In recent years many countries of Europe have sought to greatly increase the replacement rate. For example,

The Government Pary of Belgium has aimed at an eventual 75 percent of *lifetime* earnings, and Italian legislation has set a goal at 80 percent of earnings in the last three years of work. In the United States, some social planners currently speak of an assured flow of income of probably 50 percent of the earnings of recent years—not the lifetime earnings—for a single worker and 66 2/3-70 percent for a couple (Horlick, 1970).

The standard family budgets estimated by the Bureau of Labor Statistics (BLS) may be used as a guide for thinking through the question of relative adequacy of income. In spring 1969, for a retired couple (with husband age 65 or over and wife not in paid labor force), the lower budget required \$2,902, the intermediate budget, \$4,192, and the higher budget, \$6,616. If these budgets were used as benchmark income figures, retirement programs could be designed under which earnings and benefit replacement relationships would produce retirement incomes that approximate these income levels based on earnings histories of the covered workers. (See Appendix B. for the retired couples' budgets.)

BLS has also devised an "equivalence scale" as an objective means of identifying equivalent levels of consumption for families of varying composition. The latest such scale estimates that a single person age 65 or over requires 28 percent, and an average retired couple 52 percent, of the standard budget required by a city worker's family with head between ages 35-54, a wife and two children (the oldest child six to 15 years of age). Rather than compare a middle-aged family with a retired couple, it is perhaps more appropriate to compare the BLS equivalence scales for couples aged 55-64 and couples aged 65 or more; the scales show only about a 13 percent difference in goods and services needs. (See Appendix C. for the city worker's family budgets and Appendix D. for the "Equivalence Scale.")

2. Maintaining Adequacy in Retirement

Even when some measure of agreement is reached on the level of relative adequacy of income with regard to preretirement and postretirement income, there remains the all-important question of how to provide it. Since income security is an ingredient of income adequacy, another question of equal significance is how to ensure security of retirement income over time, in view of the continuing price inflation which erodes the purchasing power of an initially adequate level of income when retirement begins.

Another aspect of relative adequacy deals with the standard of living of the retired during the entire period of retirement, as compared with that of the working population at large. Basically, this question concerns the *relative* rates of increase between the income of the retired and the income of the working. Because the retired are not participating in the productive process, their income position will worsen relative to that of the working when the latter receive higher incomes as a result of economic growth. This disparity widens as the retirement period lengthens and as the economy grows more rapidly.

Of course, it could be argued that since the retired are not working, they receive leisure as a form of compensation, whereas the working are currently productive and therefore gain

more income as a return. However, leisure among the aged may be voluntary or involuntary. A compulsory retirement age and inducements to early retirement, as discussed in the Background Paper on "Retirement," certainly raise the question of how much leisure among the elderly is being *enjoyed* and how much of it is being *endured*. Moreover, since economic growth, like progress in other fields of human endeavor, is built upon past contributions, and since the retired participated in laying the foundation of that progress in their working years, it could be argued that they, too, deserve recognition in the form of higher retirement incomes as current productivity and production advance. Even if this view is accepted, the methods by which higher retirement incomes are to be made available would be an important question.

With regard to income security (as opposed to income adequacy) protection against the erosion of purchasing power of a given amount of retirement income could be provided in several ways. One possibility would be to make ad hoc adjustments to Social Security benefits, as has been the case; but this rather unsystematic method may not be the best device. Another possibility would be to provide automatic adjustment in accordance with increases in the cost of living. In order to make this a viable means of adjustment, it seems that the taxable earnings base should be adjusted upwards as well.

A third possibility might be to invest the trust funds under Social Security in Federal Government bonds, which would provide constant purchasing power (Constant Purchasing Power Bond). The ability of the government to honor such obligations would come from the larger tax base (in general) during inflationary times and from economic growth over time.

With reference to providing income security for the retired in terms of comparing their income with that of the working nonaged, there are likewise several possibilities. One method may be for society to assign, albeit somewhat arbitrarily, a certain percentage of the rate of economic growth from year to year as a basis for increasing retirement income of the elderly (Spengler and Kreps, 1963). This method would be premised upon the contention that current economic progress can be in part traced to the contributions of the past which the retired of today as a group have helped to make. Another method, somewhat similar to the one mentioned above, might be to invest all trust funds under Social Security and part of the funds in private pension plans in the "constant purchasing power bonds" referred to in the preceding paragraph.

The ability of an individual and the society to provide adequate and secure retirement depends on available resources and the demands on them, both of which are influenced by economic as well as demographic factors. Demographic trends and their implications will be taken up as the next topic.

3. Alternative Means of Obtaining Adequacy

At the present time, retirement income is derived from a variety of sources—those sponsored by government programs, those under auspices of labor and business group plans, and those built up through the personal efforts by the individuals and their families. Given this system of shared responsibility, the question naturally arises as to what are the respective roles of collective actions (both government and nongovernment) and individual personal efforts. There may never be any consensus on the proper mix of this responsibility. However, assuming personal preferences and individual initiatives are to be encouraged, it would seem appropriate to suggest that the multiple system that now exists be maintained and expanded to widen the range of choices and extend as much flexibility as possible. On the other hand, recognizing that (1) income adequacy and income security in accordance with the American standard of living is a desirable goal, (2) the ideal of maximum freedom of choice may not become a reality for some people, and (3) below-poverty level of income is inconsistent with the American standard of living, it appears clear that the provision of a "minimum adequacy" level of income in order to eradicate poverty or absolute deprivation is a program the society as a whole would underwrite.

Relative adequacy is also a component of the American standard of living. As pointed out previously, the assurance of relative adequacy in retirement income has as its basic purpose the relief of feelings of relative deprivation. A tentative benchmark income which represents approximately one-half (40-50 percent) of preretirement income was earlier suggested as a point of departure for discussion purposes.

Provision of relative adequacy level of income would be a much simpler problem to handle if there were only one mechanism, for example, Social Security, instead of many mechanisms of which Social Security is only a part. Under a system of multiple programs, coordination among them is a significant question: What is the optimal mix of these programs? The difficulty is also compounded when retirement income is derived from voluntary actions as well as from compulsory programs. The reason is that the previous question of the optimal mix is made complex by the degree or scope of available choice. To be more specific, the complexity in terms of how to provide or generate relative adequacy level of income lies squarely in the relationship between these competing as well as complementary methods of income provision. For example, more contributions into Social Security would result in higher benefit payments for retirement, and the same holds true for private pension plans. However, some choice has to be made between contributing more into one or the other in cases where both methods are available to a worker. Moreover, more contributions into either or both of these programs will of necessity reduce one's ability to save privately by accumulating real or monetary assets after meeting the many expenses for daily living.

Given the wide variations in preferences and life styles among people and given the diversified sources of retirement now in existence, the questions of how to assure relative adequacy might be answered by devising a well-integrated mechanism under which the sum total of retirement income derived from both Social Security and private pension plans would amount to the tentative 40-50 percent of preretirement income. As pointed out before, the replacement rate that is often discussed relates to the Social Security system alone. Social Security does not extract contributions on *total* income of a worker, rather, only a fraction of a worker's income is subject to that tax. Customarily, private pension plans are designed to supplement what a worker may expect from Social Security. In a recent study, the estimated replacement rate for an average worker covered by Social Security in the United States ranged from 29 percent for a single male full-time industrial worker to 44 percent for a couple if the retiree was age 65 with wife of the same age and had ceased work at the end of 1968 (Horlick, 1970).

At the present time, there are no firm data on which to analyze what the combined retirement income from Social Security and private pension plans represents in terms of preretirement income. There seems an urgent need to develop research plans to utilize existing and new income data, both pre- and postretirement, in order to estimate the magnitude of the lack of relative adequacy among the elderly.

B. DEMOGRAPHIC TRENDS AND THEIR IMPLICATIONS

In 1930, persons 65 years of age or over numbered 6.6 million; today there are about 19.8 million in this age category. It is estimated that the aged will total 23.5 million in 1980 and 27.5 million in 1990. The numerical importance of the aged may also be shown in the proportion they represent in the total population. This proportion grew from 5.4 percent in 1930 to 9.6¹ percent in 1970, and is estimated that it will rise to 10.4 percent in 1980 and 11.1 percent in 1990 (See Tables 3 and 4.).

In the two decades from 1930 to 1950, the American population was aging, that is, the median age of the population increased from 26.5 to 30.2 years. Between 1950 and 1970, however, the population has grown younger, the median age decreasing from 30.2 to 27.7 years. According to the most recent population projections for the period 1970 to 1990 made

¹Since this paper was completed, published population figures for 1970 are now available making this figure 9.9.

by the Census Bureau, the median age is estimated to rise from 27.7 to 29.3 years in 1980 and to 31.6 years in 1990 (See Table 4.).

The ratio of the number of persons 65 years old or over to the number of persons between age 20 and 64 (commonly referred to as "old-age dependency ratio," though not completely accurate because not all 65 years or over are dependent) has been rising since 1930—from 9.7 percent to 18.4 percent² in 1970. This ratio is expected to rise to 19.3 percent in 1990 (See Table 4.). Analysis of the trend of this ratio shows that a very limited further rise is expected in this decade, and a small rise (in historical terms) in the next decade. It should be pointed out, however, that this ratio uses age 65 as a dividing point. If the age limit is lowered to 62 or 60, owing to early retirement, the slower rates of increase in this ratio (compared to those in the last few decades) expected in this decade and the next may have to be revised.

Life expectancy for men at age 20 increased between 1900 and 1960 from 42.2 to 49.6 additional years beyond the age of 20. At the same time, worklife expectancy increased only very slightly—from 39.4 years in 1900 to 42.6 years in 1960. As a result, the number of years in retirement went up from 2.8 years in 1900 to 7.0 years in 1960 (See Table 5.). The large gain in life expectancy took place in the first half of the century. Between 1950 and 1960 only 0.7 years was added. It is open to speculation as to how much more longevity may be realistically expected in future years. Major breakthroughs in the fields of physiology and medicine will be required to produce increments in life expectancy that are larger than that which may now be estimated. Despite its rise of 3.2 years between 1900 and 1960, worklife expectancy declined by 0.5 years from 1950 to 1960. Early retirement trends, if continued, will cause further reductions.

The lengthening period of retirement years, the increasing proportion of retirement years to working years, and the aging of the population—together with the growing dependency ratio—give rise to implications for income maintenance in old age. One set of implications affects the transfer of income from the working to the nonworking population, while another set involves the transfer of income from the working years to the nonworking years. These transfers are made more difficult in a society that is aging because there are more aged to be supported, and also because for each year in retirement there are fewer working years in which to accumulate income for retirement use (Spengler, 1969). To provide a balanced perspective, however, it should be recognized that these problems should be less acute in the 1970's and 1980's because the major demographic changes have already occurred. A somewhat optimistic note may thus be sounded for today's workers (tomorrow's retirees) about their retirement income problems as compared with today's retirees (yesterday's workers). Of course, these income transfer problems would be less burdensome if productivity of the individual and of the society increases. These problems are made more difficult when gains in productivity are partially or totally offset by price inflation, necessitating larger transfers to maintain a given level of real retirement income.

Table 3, on the composition of the aged population by age and sex, reveals a few interesting demographic changes with income maintenance implications. Changing composition of the subgroups in terms of male-female ratio and in terms of the proportion of the older aged (those 75 and over and 85 and over) in the aged population will now be analyzed.

First, let us look at sex distribution among the aged. For every 100 males, there were in 1930, 99 females; in 1960, 121; in 1970, 136; and an estimated 144 in 1980 and 148 in 1990. The increasing proportion of females in the aged population is clearly shown by these figures. However, the largest increase in the female-to-male ratio took place between 1960 and 1970, and from the standpoint of income maintenance in old age, this phenomenon explains in no small measure the special economic plight of today's aged females.

Second, let us take age breakdowns among the aged. The proportion of the 75 and over group in the aged population (65 and over) rose from 29 percent in 1930 to 34 percent in

²Since this publication was completed, published population figures for 1970 are now available making this figure 18.9.

1960, and to 38 percent in 1970. This ratio is estimated to become stabilized at about 38 percent through 1990.

Over the years, the 85 and over group has become a distinct "older aged" group. They numbered 930,000 in 1960, 1.3 million in 1970, and are estimated to be 1.8 million in 1980 and 2 million in 1990. In terms of proportions, this 85 and over group represented 5.6 percent of the total aged in 1960, 6.7 percent in 1970, and is expected to be 7.6 and 7.4 percent in 1980 and 1990, respectively.

From the retirement income point of view, the emergence of older aged groups up through the 1960's offers a great deal of explanation for the very low economic status in which persons 75 and over find themselves today. In a sense, the economy or public policy was ill-prepared between 1960 and 1970 for the arrival of a "bumper crop" of these older aged—38 percent increase for the 75 and over group and 44 percent for the 85 and over group.

With respect to both of these older groups (75 and over and 85 and over), the rate of increase in their proportion in the aged population (65 and over) is expected to decline. For the 75 and over group, a 16 percent rise is estimated in the 1970's and a 20 percent rise in the 1980's. For the 85 and over group, a 34 percent addition is estimated from 1970 to 1980, and a 14 percent addition from 1980 to 1990. In view of these expected trends, the older aged persons in the future may be expected to be better situated financially than today's older aged. They may be expected to be better off because there would be proportionately fewer of them, and they are now recognized as a distinct subgroup among the aged.

There is another noteworthy point. Females comprise the majority of the 75 and over and the 85 and over groups. This is not surprising in view of earlier references to the female-to-male ratios. However, this point bears emphasis from the standpoint of income maintenance for the older aged females. In the 75 and over group, females represented 57 percent in 1960 and 60 percent in 1970, and their proportion is expected to rise to 63 percent in both 1980 and 1990. In the 85 and over group, females accounted for 61 percent in 1960 and 62 percent in 1970—a nearly identical proportion; however, females are estimated to increase to a 66 percent and 67 percent proportion of this group in 1980 and 1990, respectively. Although in both instances, the proportion of females in the older aged groups is expected to stabilize from now until 1990, the trend is upward in the two decades hence. *If income maintenance policy for the future does not take into account this aspect of demographic development, the economic status of these older aged females will develop into a major problem, similar to today's aged females.*

C. LEVELS AND SOURCES OF INCOME

1. Levels of Income

In 1958, the total income from all sources received by persons aged 65 and over was estimated between \$25 and \$30 billion (White House Conference on Aging, 1960). According to the latest available information from the Social Security Administration found in its "1968 Survey of the Aged," in 1967 the aggregate income of persons age 65 and over, including their spouses if present, was about \$61 billion (Bixby, 1970). The Social Security Administration in conducting the survey and also in the 1963 Survey (Epstein and Murray, 1967) used as the basic interview unit a married couple living together with at least one member age 65 or over or an unmarried person aged 65 or over. (Although the 1963 survey included persons age 65 or older, the data for those age 65 and over were separately tabulated and analyzed.)

Since the methodology was consistent in the 1963 and 1968 surveys, the analyses here of income-level changes will focus on what transpired between 1962 and 1967. For 1962, the aggregate income from all sources received by persons age 65 and over (including their spouses, if present) was estimated at a little more than \$38 billion (Epstein and Murray, 1967), and for 1967 at about \$61 billion, as stated and cited above. During this five-year period, the total income of the aged units increased by more than 60 percent. However, since the number of

aged units went up more than 11 percent (from 14.2 million to 15.8 million) and the price level increased by about as much (the Consumer Price Index went up from 105.4 to 116.3), real income per aged unit is a more meaningful measure of income change. With adjustments for population and price increases, the estimated real income (average or mean income) per aged unit increased from \$2,543 in 1962 to \$3,329 in 1967 (both expressed in 1957-59 dollars), an increase of about 30 percent. An estimate of 30 percent improvement in income per aged unit in *constant* dollar terms would seem rather high. For, according to the Census Bureau, the *median* income in constant dollar terms of aged families increased only by 11 percent between 1962 and 1967, when the rate of increase for other age groups ranged from 17 percent to 25 percent (See Table 6.).

The difference between these two improved factors—30 percent vs. 11 percent—in the income of the aged over a five-year period cannot be fully explained by the difference between the mean income and the median income nor by the definitional differences between the surveys by the Social Security Administration (the aged units) and the Bureau of the Census (families by age-of-head, in this case, age 65 and over). Discussions held at the various Federal agencies including the Social Security Administration and Bureau of Labor Statistics have led this author to believe that the 1962 income of \$38 billion could have been too low for that year. The major problems seem to center around the underreporting of income from assets and income from employment. Unfortunately, the extent of the suspected or possible underestimation of the 1962 aggregate income cannot be ascertained at this time. Even if the 1962 aggregate income is raised by about 10 percent, the increase in the average per aged unit income in constant dollar terms is still more than 25 percent between 1962 and 1967. (Of course, it should be realized that the same problems have plagued the "1968 Survey of the Aged" as well.) Whether or not the \$61 billion figure for 1967 needs further adjustments is open to speculation at this time.³

2. Sources of Income

There are a number of sources from which the aged derive their incomes, namely: employment, Social Security and other public pensions, veterans benefits, private pensions, income from assets, public assistance, and other sources such as contributions of relatives and friends. During the decade from 1958 to 1967, some changes occurred in the relative importance of these income sources (See Table 7.).

First, income from employment showed a steady decline, dropping from 37-38 percent to 29-30 percent.

Second, Social Security, on the other hand, showed an increase from about one-fourth to about one-third of the aggregate income of the aged.

Third, private pensions did not exhibit any clear trend over the entire period; however, an increase from 3 percent to 5 percent was observed in a five-year period, 1962 to 1967.

Fourth, income from assets was estimated to be 14 to 23 percent of aggregate income received by the aged in 1958. This fairly broad range is possibly due to lack of firm data and the inclusion of contributions from relatives and friends. Comparing 1962 and 1967—depending upon assumptions as to whether adequate adjustments have been made to correct underreporting—income from assets as a source of income either did not change, staying at 15 percent, or increased from 15 percent in 1962 to 25 percent in 1967, a very dramatic increase. This is an unsettled issue as the discussion in the previous section on levels of income shows.

³After consultations with Federal officials on this matter this author concludes that the adjustments to the 1962 and 1967 income shares from different sources were made on quite different bases. Apparently no complete account was taken of the known underreporting of assets in the 1963 Survey. Therefore, any statement regarding the trend in aggregate income received by the aged units should be qualified by these considerations. However, it appears that from 1962 to 1967 there was indeed a substantial improvement in the *real* income of the aged units, probably in the neighborhood of more than 20 percent.

Fifth, public assistance became an even more minor source of income, declining from between 5-7 percent in 1958 to 3 percent in 1967.

Finally, public pensions other than Social Security and veterans benefits, as well as the miscellaneous ("other" category), remained about the same during these years.

For 1967, the distribution of relative sources of income was (Bixby, 1970):

<u>Sources of income</u>	<u>Percent</u>
Earnings	30
OASDHI	26
Other public pensions	6
Veterans benefits	3
Private pensions	5
Income from assets	25
Public assistance	3
Other	2
	<hr/>
	100

3. Distribution of Income

Two aspects of income distribution of the elderly are of interest, one relating to the relative position they hold vis-a-vis the nonaged, and the other relating to the relative positions among the various subgroups of the aged. They will be discussed in turn.

3.1. Aged vs. Nonaged.

Table 8 shows the trend in median current money income of the aged families and unrelated individuals as compared with that of their nonaged counterparts. For the period 1960-1969, the median income of aged families averaged under 50 percent that of nonaged families. The ratio was 50.6 percent in 1962 (having risen slightly from the previous two years), then steadily fell to 46.2 percent in 1967, increased to 49.9 percent in 1968, and then declined to 47.6 percent in 1969. Over the same 10-year span, the median income of the aged families rose by 65.8 percent and for nonaged families by 70.8 percent.

These statistics lead to a number of interesting observations. First, despite minor fluctuations from year to year, there seems to be a relatively high degree of stability of the comparative income position of the aged families in relation to that of the nonaged families. Second, the relative income position of the aged vis-a-vis the nonaged families has worsened since 1962, declining from 50.6 percent to 47.6 percent in 1969, with a brief interruption in 1968 when the ratio was 49.9 percent.⁴ Third, income levels are significant because they provide a measure of the ability to obtain goods and services. Thus, the slower rates of annual increase in the money income of aged families and the general decline in their incomes proportionately to that of the nonaged should be considered along with the increases in various sources of nonmoney income, notably Medicare and Medicaid, to be discussed in Section III, D. Other Forms of Income Support-I.

As far as unrelated individuals are concerned, the incomes of the aged averaged about 42-43 percent of those of the nonaged. The highest ratio, 47.2 percent, was recorded in 1962. It declined to 40.5 percent in 1967 and then rose to 43 percent in 1969.

⁴Although these estimated ratios are derived from a national probability sample of households, they are subject to both sampling variability and errors in response and nonreporting. Therefore, year-to-year changes, especially minor ones such as those less than 5 percent, should be interpreted with recognition of problems relating to sampling and rates and quality of responses.

3.2 Among the Aged Subgroups.

Considerable variations exist among the various subgroups of the aged, according to race, sex, and family composition, as demonstrated in Table 9 on median incomes of families and unrelated individuals in 1969.

These median income figures are not surprising in light of later discussions on poverty and common observation. However, several points are still noteworthy. First, median incomes of Negroes in all categories are lower than their white counterparts. The higher the income level, the greater the discrepancies between whites and the Negroes. For example, families headed by a white male with a wife working for pay in 1969 had a median income of \$7,802—the highest of all median incomes—while their Negro counterparts had a median income of only \$4,596. Second, median incomes of female-headed families had higher median incomes than male-headed families: \$4,986 vs. \$4,779 (all races) and \$5,699 vs. \$4,884 (white). Only in the case of Negroes did families with female heads have a lower median income, \$2,511, than male-headed families of the same race, \$3,222. Third, single Negro females had the lowest median income (\$1,263).

D. OTHER FORMS OF INCOME SUPPORT-I

The sources and levels of income described in the section immediately preceding did not include certain other forms of income support. For instance, Medicare, Medicaid, and other public programs paid \$9.7 billion for the aged, in the fiscal year 1969, which represented 70 percent of the total medical cost of \$13.5 billion. Three years earlier, before Medicare and Medicaid had been created, \$2.4 billion of the total health care expenditures of the aged was paid out of public funds, representing only 30 percent of the total cost of \$7.8 billion in fiscal year 1966 (Cooper, 1970).

The Federal personal income tax law provides preferential treatment for the aged in various ways. For the year 1966, this favorable treatment was estimated by the U.S. Treasury at \$2.3 billion, and this amount went to 60 percent of the aged (11 million out of 18 million persons 65 years old and over). However, it was rather unevenly distributed among persons in different income brackets: one-fourth of the tax reduction went to persons having incomes of \$3,000 or less; another fourth to persons with incomes between \$3,000 and \$5,000; and the remainder, about one-half, to persons with incomes above \$5,000. About seven million aged persons, 40 percent of the total, received no reductions in taxes because their incomes were too low to be taxable. (McCauley, 1967). For 1969, the revenue effect of special tax benefits for persons 65 and over was estimated by the U.S. Treasury at \$2.7 billion (See Table 10.).

In 1969, tax-free income levels for individuals age 65 and over under the Federal personal income tax structure were \$1,600 on single returns, \$2,300 on joint returns with one taxpayer aged, and \$3,000 when both taxpayers were aged. Projecting to 1973, tax-free income levels on single returns would be \$2,500; on joint returns, \$3,250 with one taxpayer aged; and \$4,000 with both taxpayers aged (See Table 10.).

Similar favorable tax treatment for the aged is also available in many State income tax laws. Estimates of tax reductions from this source are not available, however.

A number of States have still another form of tax benefit—property tax relief. While a large proportion of the aged own their homes but have generally low current incomes, rising property taxes in the last decade or so have placed an extremely heavy burden on this age group. In recognition of this problem, property tax concessions of one kind or another (exemption, credit, deferment) have been offered to aged homeowners since the late 1950's. In 1965, special tax considerations were in effect in seven States (Indiana, Maryland, Massachusetts, Michigan, New Jersey, Oregon, and Wisconsin); currently, there are twenty

States in which property tax concessions are offered.⁵ Elderly renters now receive some relief in three States: Wisconsin, Minnesota, and Vermont. A mail survey was sent out by the author to officials in all of these States concerning estimated property tax reductions for the elderly homeowner. Returns from 16 States report that for 1968-70 the annual total tax reductions amounted to about \$130 million (Chen, 1965; Greenfield, 1966; Schulz, 1970a).

In addition to the above forms of noncash income support, the various levels of government offer a number of special programs for the aged, including housing subsidies, transit subsidies, and the like. Estimates of benefits from these sources are not available.

E. OTHER FORMS OF INCOME SUPPORT-II

In addition to income support from medical services, tax concessions, housing and transit subsidies, and the like, there are also other forms of supplementation to current money income.

One such source of income comes from imputed net rental value of owned homes. As will be shown later (section III. G.), home equity plays a very important part in the net worth position of the elderly. It is therefore relevant to consider the contribution homeownership makes toward the economic status of the aged. The finding of one recent study is that the inclusion of imputed net rent in the income of low-income aged would shift the measured distribution of income upward considerably (Schulz, 1967). Another recent study on the same subject shows that for all the aged, their income would be increased between 4.7 to 5.7 percent if imputed net rental value was included, and for these aged with incomes under \$3,000, the increases would be between 8.7 and 10.6 percent. The ranges of increment in income are the result of different methods used for imputing rental value (Bridges, 1967). These results are not surprising because in general the ratio of house equity to money income is very high among the aged.

For at least two reasons, however, caution should be used in interpreting the addition to money income from imputed rental value. First, this form of income is not subject to the discretion of the person in its allocation as money income is. Second, imputed rental value may overstate the enrichment of the economic welfare of the elderly homeowners when they are "overhoused"—houses too large to meet their shelter needs (Morgan, 1965).

While both of the above points are well taken, it remains true that the owned home provides a stream of very valuable real income that is continuously realized every day. Of course, the phenomenon of "overhousing" sheds a different light on the matter. Imputation of rental value does indeed overestimate the addition to the real income of an "overhoused" elderly homeowner. However, it may be questioned as to why they are overhoused. Is it by choice or by default? This raises the further question of how to realize the capital value of the house, especially in such cases—a problem to be explored later in this paper.

Another source of supplementation to current income comes from dissavings. The extent of dissavings may be appreciated from the most recent nationwide Survey of Consumer Expenditure of 1960-61 conducted by the U.S. Bureau of Labor Statistics (1966b). This survey evaluates savings based on net change in assets and liabilities. If the net change is positive, the survey unit had savings; if negative, dissavings. According to one study, which made use of the BLS Survey data for the United States urban population, in 1960-61 only the youngest group (under age 25) experienced dissavings while all other age groups (including age 65-74 and age 75 and over) showed savings (Goldstein, 1965).

In order to discover the relationship, if any, between income levels and dissavings, the author has utilized the same BLS Survey data used by Goldstein. Preliminary computer analysis shows that although both aged groups (age 65-74 and age 75 and over) *as a whole* had savings in 1960-61, *persons over age 65 with incomes less than \$4,000 as a group experienced*

⁵These are California, Connecticut, Delaware, Georgia, Hawaii, Indiana, Maryland, Massachusetts, Michigan, Minnesota, Montana, New Hampshire, New Jersey, New York, North Dakota, Oregon, Rhode Island, Vermont, Washington, and Wisconsin.

net dissavings. Preliminary calculations also show that in 1960-61, almost 60 percent of those in the 65-74 group and more than 80 percent of those in the 75 and over group had incomes less than \$4,000. Therefore, there is evidence that many low-income aged did use their savings to augment their current money incomes.

F. POVERTY AND STANDARD BUDGETS

1. Poverty

Trends in poverty may be one of the statistics suggestive of how the economic circumstances of the aged have been changing. Between 1959 and 1969, there was a significant reduction in the number of poor families and poor unrelated individuals in America. In general, the reduction of poverty among the aged has been at a slower pace than that for the population as a whole, as the accompanying tabular breakdown shows.

1.1. Poor Families.

In 1959, 30 percent of all aged families were poor and in 1969, 17.6 percent—a decline of about 41 percent, which is slightly less than the drop of more than 48 percent for all families (of all races, and all ages).

In terms of race, the proportion of white aged families in poverty decreased from 26.8 percent in 1959 to 15.6 percent in 1969, a decline of about 42 percent as compared with a 49 percent drop for all poor white families during the same period (from 15.2 percent to 7.7 percent). There was a 43 percent reduction of poverty among nonwhite aged families during the same period when the proportion of all nonwhite families in poverty showed a 47 percent decline.

In terms of headship, poor aged families with a male head experienced a reduction of between 44 and 49 percent from 1959 to 1969, whereas all poor families with a male head showed a decline of between 55 and 61 percent during this period. On the other hand, poor aged families with a female head had a much smaller rate of poverty reduction, about 25 percent between 1959 and 1969, an experience shared by all poor families headed by a female.

PERCENT REDUCTION IN INCIDENCE OF POVERTY, 1959-1969
Total Poor vs. Aged Poor

		<i>Poverty in total population</i>	<i>Poverty among aged population</i>
Families	All races	48%	41%
	White	49	42
	Nonwhite	47	43
Male head	All races	56	45
	White	55	44
	Nonwhite	61	49
Female head	All races	24	25
	White	27	28
	Nonwhite	26	—

PERCENT REDUCTION IN INCIDENCE OF POVERTY, 1959-1969—Continued
Total Poor vs. Aged Poor

	<i>Poverty in total population</i>	<i>Poverty among aged population</i>
Unrelated individuals		
All races	27%	28%
White	28	31
Nonwhite	22	7
Males		
All races	31	32
White	31	36
Nonwhite	31	—
Females		
All races	26	28
White	28	30
Nonwhite	16	—

Source: Based on detailed tabulations, Tables 11 through 16.

To summarize, during 1959 and 1969, poor families with a female head, aged or otherwise, showed the least reduction in the incidence of their poverty. Poor aged families with a male head showed a substantial decline in poverty, but the reduction was about 11 percentage points less than all poor families with a male head.

1.2. Poor Unrelated Individuals.

In 1959, 66 percent of all aged single persons were poor, and in 1969, 47.3 percent—representing a drop of about 28 percent, which was about the same as the ratio of reduction among all single persons, 46.1 percent of whom were poor in 1959 and 33.6 percent of whom were poor in 1969.

In terms of race, white aged single persons in poverty experienced a drop of 31 percent, which was a greater rate of reduction than occurred among all poor white single persons. The most striking phenomenon is that poor nonwhite aged single persons showed a reduction of only 7 percent during the decade (76.6 percent in 1959 and 71.1 percent in 1969). In contrast, all poor nonwhite single persons had a reduction of 22 percent.

In terms of sex, the males, aged or nonaged, white or nonwhite, showed a rate of reduction of around 30 percent, with aged white males experiencing a slightly greater rate of

reduction, 36 percent. The females, on the other hand, had a reduction rate of less than 30 percent, whether aged or otherwise, white or otherwise.

Despite the improvements summarized above, the relatively high and uneven incidence of poverty among the aged in 1969 can be clearly seen in the following statistics:

Incidence of Poverty	All		
	racess	White	Nonwhite
All aged families	17.6%	15.6%	40.6%
All aged families with a male head	16.4	15.0	36.1
All aged families with a female head	23.6	18.8	51.3
All aged unrelated individuals	47.3	45.0	71.1
All aged male unrelated individuals	39.8	36.3	62.1
All aged female unrelated individuals	49.9	47.7	76.6

It is evident that (1) the proportion of poor elderly single persons is much higher than the proportion among elderly families; (2) the proportion of nonwhite elderly, whether heading a family or as single persons, is much higher than the proportion among their white counterparts; (3) the proportion of elderly females, whether as family head or as unrelated individuals, is much higher than their male counterparts; and (4) therefore, the worst lot is visited upon the nonwhite single females.

2. Standard Budgets

As mentioned earlier, the Bureau of Labor Statistics has estimated three standard budgets for the retired couples, the "lower," "intermediate," and "higher" budgets (See Appendix B.). (The "intermediate" budget is comparable to the "moderate but adequate" budget which was the only budget estimated prior to 1967.)

Trends in the proportions of retired couples with enough current money incomes to meet the various levels of living (as suggested by these budgets) may also be indicative of how the economic circumstances of the aged have been changing. However, at least four points require emphasis when interpreting the changes that have occurred.

First, unlike the statistics on poverty for which trends during the last ten years were discussed above, the number and percent of retired couples with current money income below, within, and above the three standard budgets are available only for 1967 and 1969. There are no conceptually consistent estimates for these budget levels for prior years (Lamale, 1971a).

Second, these budgets are estimated for a specific type of retired couple: families with male head 65 or over and wife not in paid labor force. Therefore, the numbers and percent of such families with incomes below or above specified budget levels may *not* be readily generalized to represent all aged couples nor aged population as a whole.

Third, the income data which are used for distributing families among the three budget levels are the U.S. Census income distributions *for all* families of the specified types, including rural families—while the budget cost levels are for *urban* families only. Since urban family incomes are higher than those of rural families, there is an upward bias in the percentages for the low end of the income distribution, but the magnitude of the bias cannot be measured with available data.

Fourth, no *great* degree of significance should be attached to shifting percentage distributions, if any, of such families over a two-year period (1969 vs. 1967), simply because the shift may be a transitory phenomenon. Therefore, guarded optimism should accompany any observation of improvements (for example, reduction in the percentage of families below the lower budget, or increase in the percentage of families above the high budget), and no undue pessimism should be expressed in cases where the opposite situation is found.

As Tables 17a and 17b show, the proportion of the retired couples with current money incomes below the lower budget costs fell from 35 percent in 1967 to 30 percent in 1969, showing a 14 percent reduction. The proportion of these couples with current money incomes above the higher budget costs rose from 27 percent in 1967 to 30 percent in 1969, representing an increase of 11 percent. These improvements are not inconsequential. Optimism is therefore not out of place here, although it should be tempered with the warning given above.

In order to gain some perspective, the improved position among retired couples may be compared with what took place among the city workers' families. Shown in Tables 17c and 17d, there was a drop of 11 percent in the city workers' families with current money incomes below the lower budget level (from 18 percent in 1967 to 16 percent in 1969). There was a rise of 13 percent in families of this budget-type with current money incomes above the higher budget costs (from 23 percent in 1967 to 26 percent in 1969). Thus, during 1967-69, both types of families improved their ability to meet BLS estimated budget costs.

G. NET WORTH, HOMEOWNERSHIP, AND LIQUID ASSETS

An assessment of economic circumstances in terms of current income only, that is, without reference to net worth (assets less liabilities), does not present a complete picture. Statistics on net worth are not easily available. The net worth position of the aged vis-a-vis that of other age groups in 1962 can be examined from two surveys: the "Survey of Consumer Finances," conducted by the Survey Research Center, University of Michigan (1960-present) and the "Survey of Financial Characteristics of Consumers," compiled by the Federal Reserve Board of Governors (Projector and Weiss, 1966). Although striking discrepancies exist between these two estimates, the important point is that the median net worth of the age 65 and over group was substantially larger than the median net worth of families headed by persons under 45. The median net worth of the aged was surpassed by two age groups—55 to 64, and 45 to 54 (See Table 18.).

Specifically concerning the role of assets in measuring economic circumstances among the aged, considerable insight was provided by the data from the Social Security Administration's "1963 Survey of the Aged" (Epstein and Murray, 1967). If assets of the aged were converted into currently spendable income for life (resulting in exhaustion of asset holdings at life's end) according to various assumptions based on sex differentials in longevity, interest rate, and the like, additional income (potential income) would be available. Improvements over actual income in 1962 among aged units when their potential income was considered can be estimated. If asset conversion did not include home equity, the percentage improvements in median income ranged from 9 to 14 percent for married couples and unmarried persons. On the other hand, if home equity was included in the conversion, a much greater extent of improvement in median income resulted, ranging from 32 to 37 percent for married couples and unmarried persons (See Table 19.).

In interpreting the above statement, it should be borne in mind that this is merely a theoretical consideration of a more comprehensive view of the economic position of older persons. There are as yet no practical institutional mechanisms that make this conversion feasible; hence, at present, this is not a realistic approach. Of course, the aged can sell their homes and any other asset and use the proceeds to buy an annuity. They thus may realize the value of their assets. However, availability and cost of alternative housing should be considered.⁶

From the high incidence of homeownership among the aged, it may be inferred that they put a high value on homeownership. The proportion of nonfarm families headed by a person 65 years old and over who are homeowners rose from 59 percent in 1949 to 71 percent in 1969, keeping pace with the increase in homeownership of all homeownership families.

⁶See Section III.J. Special Problem—Housing, for further discussion.

Between 1960 and 1969, however, the aged showed a higher rate of increase in homeownership than that for all families, more than 9 percent as compared with about 5 percent for the latter (See Table 20.). Home equity represents a highly significant portion of the net worth of the aged; very often it is their only asset. The implications of net worth position and status of homeownership among the aged for income security cannot be ignored. Particular attention should be paid to the critical role of home equity in the economic balance sheet of older persons, because the building up of home equity very often is the major act of saving (of the individual type, as opposed to contributions to Social Security and private pensions) that people are obligated to perform during much of their lifetime. But, this form of savings is, under existing financial practices, locked in the house until the latter is sold.

In the context of discussing poverty in the preceding subsection, it would be interesting to see how the consideration of potential income would change the poverty status among the aged. The incidence of aged poverty would be reduced if potential income were added to current income. For 1962, \$1,800 and \$1,500 approximated very closely the poverty "threshold" incomes suggested by the Social Security Administration for married couples and unmarried persons. According to actual income in 1962, 22 percent of married couples were poor; the rate declined to 19 percent when potential income *excluding* home equity was the measure, and it dropped further to 13 percent when home equity was included in the potential income. These comparisons suggest substantial improvements in economic circumstances, referring to the reduction in the incidence of poverty when net worth is considered. Though they were not as substantial, improvements were still important for unmarried men and unmarried women as well (See Table 21.). The meaning of this exercise is that the aged as a group do have this source of potential income. If such income could be realized in terms of currently spendable income, their economic status as a group would be much improved.

While this brief discussion illustrates the importance of asset holdings or net worth positions, it should be recognized that in 1962 large numbers of older persons had either no assets or very low assets. For example, 10 percent of aged couples had no asset even when home equity was included; the percentages were 28 and 26 for aged single men and women, respectively. When home equity was excluded, moreover, 23 percent of aged couples had no assets, while 37 percent of aged single persons of either sex had none. On the other hand, when homes were included, 47 percent of aged couples had assets over \$10,000 in 1962, whereas the respective percentages were 26 and 24 for aged single men and women. Even when homes were excluded, it is of interest to note that 28 percent of aged couples had assets over \$10,000, while the percentages were 16 and 14 for aged single men and women, respectively (Epstein and Murray, 1967).

These distributional statistics point to the wide diversity of the economic position of the aged. The "1968 Survey of the Aged" of the Social Security Administration once again collected information on assets, but no data have been published as yet. It would prove very enlightening to compare what transpired between 1962 and 1967 from two surveys using basically the same methodology, particularly as studies in the past have shown high correlation between income and asset holdings.

Although conversion of assets into lifetime income may be only of theoretical interest at the present time, it can be worthwhile to examine the improving economic position of older persons during the decade of the 1960's with reference to liquid asset holdings. From available data, these include only checking accounts, savings accounts (with banks, credit unions, and savings and loan associations), and nonmarketable U.S. Government bonds.

According to the reports prepared by the Survey Research Center, the University of Michigan (1960-present), the median liquid assets (defined to include checking and savings accounts and nonmarketable U.S. Government bonds) held by the aged rose from \$1,000 to \$2,130 between 1960 and 1969, when those held by all age groups increased from \$500 to \$730. If only those aged with liquid assets are considered, their median liquid assets increased from \$3,000 to \$6,570 during the same period of time, whereas those of all age groups rose from \$900 to \$1,690 (See Table 22.).

From 1960 to 1969, the proportion of the aged without liquid assets declined from 30 percent to 23 percent. By contrast, the decline for all age groups was from 24 percent to 19 percent (See Table 23.). Over the same span of time the proportion of the aged with more than \$10,000 in liquid assets increased from 12 percent to 22 percent, the highest proportion among all age groups (See Table 24.).

There are other types of claims, such as cash value of life insurance, capitalized value of annuities and of vested pension rights, and the like. Data on these are lacking, but conceptually they deserve mention.

H. INFLATION

The latter part of the 1960's was marked by a high degree of price inflation, which at the time of this writing, has stubbornly refused to retreat to any great degree. While inflation is a problem affecting us all, it has special implications for the aged.

1. Effect of Inflation on Consumption

Although prices for all items included in the Consumer Price Index (CPI) rose more than 33 percent between 1960 and 1970 (November), certain components in the Index rose higher. Many of these tend to affect the aged most simply because they show different patterns of expenditures. Aged persons have a tendency to spend greater proportions of their budgets for those goods and services on which prices have risen more than the price increases of other commodities.

Housing cost is one of the most important items of expenditure for the aged. In the intermediate standard budget for a retired couple in Spring 1969 (Appendix B.), the following percentages are allocated to the various expenditure categories: 36.4 (housing), 28.7 (food), 10.5 (transportation), 10.0 (clothing and personal care), 8.5 (medical care), and 5.9 (other family consumption).

While the housing price index (39.3 percent) rose more than the CPI as a whole (37.8 percent) as of November 1970 over 1957-59, homeownership costs increased proportionately much more (59.3 percent). Maintenance and repairs went up 56 percent and property insurance rates 55.7 percent. Since 1963 alone, property taxes climbed by 43.2 percent (See Table 25.).

Whereas transportation cost as a whole (34.4 percent) went up less than the CPI, cost of public transportation, which is used by older persons (in general) more frequently than by persons of other ages, rose 75 percent since 1957-59 (See Table 25.).

Price inflation hits hard on people either with fixed or low income or without protection by being in a net monetary debtor position. The elderly are more likely to be in either or both of these financial situations, as discussions further on will show. The following points show the effect of inflation on older people in terms of their consumption outlays.

First, certain components of the CPI went up less than the CPI: apparel and upkeep, 35.7 percent; food, 32.4 percent; rent, 25.7 percent; fuel and utilities, 20.7 percent; and least of all, drugs and prescriptions, only 1.8 percent. However, those items that went up in prices at faster rates comprise about one-half of the standard budget for the retired couple.

Second, with regard to homeownership costs, 60 percent of them reflect home purchase and mortgage interest rates (Joiner, 1970). While no selected index is available for home purchases, a separate index on mortgage interest rates is available. Mortgage interest rates rose by 49.2 percent in November 1970 over 1957-59. These two items of homeownership costs would not have affected those who did not purchase a new home or refinance their homes. Therefore, caution should be taken when interpreting the homeownership price index as a whole. Moreover, rental index rose at a much slower rate than the CPI. Nonetheless, housing cost increases have affected the financial position of elderly homeowners because

property insurance rates and costs for maintenance and repairs went up in both cases by about 56 percent. In addition, property taxes impose an obvious and continuing burden on the homeowner, and as stated earlier, these taxes went up by more than 43 percent in the seven years from December 1963 to November 1970. In this connection, it should be pointed out that property tax concessions to the aged homeowners have become prevalent since the early 1960's. However, these tax reductions are now available in only 20 States and on a rather limited basis.

Third, as regards medical care costs, dramatic increases in several categories of health expenditures were cited earlier. These expenditures would have been a much greater burden on the elderly were it not for Medicare and Medicaid programs which came into being in the fiscal year 1966. Medical care costs will be discussed in Section III, I.

Fourth, with reference to the costs of public transportation which went up by 75 percent (a higher rate of increase than the medical care component as a whole), mention should be made of the availability of public transit subsidies that exist in a limited number of cities and localities.

2. Effect of Inflation on Income and Wealth

In terms of income, price inflation adversely affects all—both young and old—whose money incomes do not keep pace with the rate at which prices advance. Consequently, persons with relatively fixed incomes over time will have their purchasing power reduced in inverse relation to the CPI. Among the aged, many persons experience relatively stable money income over time—more than any other age group. From 1964 to 1965, for example, 57 percent of the groups aged 65 and over reported unchanged income as compared with 28 percent of all families. Seventy-four percent of the aged expected their 1966 income to be the same as their 1965 income, whereas only 47 percent of all families had this expectation (See Table 26.).

Among the aged, 75 year olds and over experienced an even greater extent of income stability than the 65-74 age group. While 65 percent of the former group had unchanged income in 1968 from 1967, 54 percent of the latter group reported unchanged income. The same pattern holds for the expectation of income: 83 percent of the group 75 and over expected no change in income from 1968 to 1969, while 68 percent of the 65-74 age group held the same prospect (See Table 26.).

The above illustrations are corroborated by the Survey of Consumer Expenditures, 1960-61. Sixty-seven percent of the aged, as opposed to 37 percent of the nonaged, reported about the same income in two successive years (See Table 27.). Moreover, 54 percent of the aged had stable incomes for three consecutive years, doubling the 28 percent reported by all survey units (See Table 28). Once again, more of the 75 year olds and older reported stable income.

The effect of price inflation cannot be fully appreciated unless the asset and liability position of a person or family is also taken into account. One gains from price inflation if one owns real assets and the market prices change with the price level (e.g., a house, a piece of land, and other claims to a physical entity), and if one owes money whose market values do not vary with price level changes (e.g., accounts payable, mortgages, bonds, and other debt items). Both conditions must exist in order to benefit from inflation. In effect, one is using other people's money to purchase real estate. With inflation, as property prices (in general) rise, as an owner of the real estate, one's holdings in real terms go up and, at the same time, as a debtor, one's obligations in real terms go down. On the other hand, one loses from price inflation if one holds monetary assets whose market values are independent of price-level changes (e.g. cash, checking and savings accounts, bonds, promissory notes, and other claims to fixed amounts of money). In the latter case, one is hurt by inflation because the purchasing power of a given amount of money declines when such claims are repaid. Of course, in order to determine the net effect of price inflation on a person in terms of assets and liabilities, it is that person's net position which counts insofar as net worth position is concerned. That is, one

benefits from inflation if *on net* one is a monetary debtor, and loses from inflation if *on net* one is a monetary creditor. One neither gains nor loses during an inflationary period if one is neither a borrower nor a lender, a Shakespearean admonition to which many an aged person seems to pay heed.

Many older persons owe very little money. In 1962, the average amount of personal debt was \$106, according to *The 1963 Social Security Survey of the Aged* (Epstein and Murray, 1967). In discussing inflation, it should be noted that the 17 percent in 1960 and 16 percent in 1969 of aged homeowners with mortgage debt was far below that of any other homeownership families; the average percentage for all families owning homes was 60 and 56 percent, respectively, at the beginning and the end of the decade (Survey Research Center, 1968 and 1969).

With reference to aged homeowners with mortgages, their average debt again was the lowest among all families with mortgage debts, \$3,790 in 1959 (when the average for all such families was \$6,810) and \$3,700 in 1969 (when the average for all families was \$9,120).

Reference was also made earlier to liquid asset holdings (Table 22) by the aged. These are claims to fixed monetary obligations which depreciate in purchasing power during price inflation. In 1962, for all reporting aged units, nearly one-quarter of their average net worth was in the form of liquid assets whose value in purchasing power declines as inflation occurs (Epstein and Murray, 1967).

In 1962, about one-third of the aged units' net worth was accounted for by equity in a nonfarm home (Epstein and Murray, 1967). Home equity is a real asset, the value of which tends to rise with price inflation. However, to benefit from its higher value, the house must be sold. It seems in general that older people are psychologically attached to their homes and therefore resist selling. Even if they choose to sell, the cost involved in the sale and the concurrent search for new living quarters would be considerable in financial and psychological terms. Moreover, comparable housing accommodations may be rather difficult to find. If the choice amounts to moving to a comparable rental place after sale of the house, subsequent monthly housing expenditures very probably will be larger than those which are presently required (only property taxes and maintenance costs if the house is mortgage-free). It is a major irony that such a large portion of older people's real assets is in a form so difficult to use to their advantage. For many, their home represents the savings of a lifetime and should serve as protection against inflation, but there is no way to realize these benefits unless the home is sold outright and unless alternate less expensive and satisfactory housing accommodations can be found. This circumstance certainly deserves searching study, especially when so many of the older homeowners are faced with problems of meeting the mounting property taxes and upkeep costs of their homes.

As indicated earlier, it is the net creditor or net debtor status of a person that determines the effect of inflation insofar as net worth position is concerned. There is as yet no study on this question with reference to the aged. The author recently made a preliminary analysis of the 1962 data contained in the "Survey of Financial Characteristics of Consumers," a study conducted by the U.S. Federal Reserve Board of Governors (1963).

Detailed information on assets and liabilities for households headed by a person aged 65 or over was cataloged into real assets, monetary assets, and debts (all debts are monetary in nature in a nonbarter economy). The net monetary creditor or net monetary debtor status (the former being a loser and the latter a gainer from price inflation) of all these households was determined. Very interesting, but not too surprising, is the finding that almost 70 percent of older households were net monetary creditors in 1962 and therefore would be adversely affected by price inflation during the latter half of the 1960's if their financial portfolios remained unchanged or substantially the same as in 1962.⁷ Another significant finding is that approximately 14 percent of aged households were neither net debtors nor net creditors and

⁷In contrast, households in 1962 headed by non-aged persons had less than one-half as many net monetary creditors, less than one-half as many who were neither net debtors nor net creditors, and almost four times as many net monetary debtors.

therefore would have been unaffected by inflation in the last few years if they continued to keep a similar financial structure. Also noteworthy is that approximately 16 percent of aged households would have benefited from the recent and current inflation if their net monetary debtor position was not changed or was substantially the same as in 1962.

I. SPECIAL PROBLEM—MEDICAL CARE

Financing and delivery of health care in this country has become a problem of staggering proportion. While the entire population is affected, the aging and the aged are more severely hurt because of their higher risks of illness and disability and because of the special services and facilities they require. As a consequence, expenses for medical care are a major factor in the budget of this age group. Although these costs, aggravated by inflation, have risen substantially during the last few years, Medicare and Medicaid have helped to reduce this tremendous increase.

In FY 1966, preceding Medicare and Medicaid, about 70 percent of the medical bills of the elderly were paid privately (i.e., by themselves or on their behalf). In FY 1969, the proportions were exactly reversed, with 30 percent of the health cost paid privately. In 1969, the average elderly person spent \$692 on health care, of which \$499 was paid under public programs and \$193 privately. Of the \$193, the largest single expense was for drugs and drug sundries (36.4 percent), the next largest for hospital care (17 percent), the third largest for nursing home care (13.9 percent), and the remaining 11 percent for doctor bills (Cooper, 1970).

There is no doubt that Medicare and Medicaid have substantially increased the welfare of the aged, not only by reducing the financial burden of health costs but also by improving their health status. However, while Medicare is very effective in financing the costs of a serious illness requiring hospitalization, it is less helpful in coping with recurring doctor bills. Medicare also excludes the long-term nursing home costs and drug expenses for chronic illnesses. Because of these exclusions, together with deductibles and coinsurance, the elderly still are bearing a sizable cost for medical care.

Background papers for this conference on mental and physical health discuss the technical aspects of health care. Here, the question of financing medical care is dealt with. Thus, to assure an adequate level of health care for the elderly, one basic question would be: Should improvements in Medicare and Medicaid be relied upon, or should this objective be achieved through a comprehensive national health insurance program?

Medical expenditures are highly variable and unpredictable insofar as individual persons are concerned, but they are predictable on the basis of a group of individuals. Therefore, the medical cost problem basically requires an insurance solution. Medicare and Medicaid are insurance programs, but they cover a group of individuals with the highest risks—the elderly. In order to spread the risks of health problems with their attendant costs, health insurance that covers persons of all ages would achieve the maximum effectiveness for the costs incurred.

Ill health can create poverty, and poverty can produce ill health. This vicious circle, among other considerations, has led to a widely acknowledged view that access to adequate health care for all in the United States should be regarded as a right. It has been recommended by many that the Nation should commit itself to a universal financing system for health care with public and private participation, generally referred to as national health insurance.

A large number of proposals for this purpose differ in the proposed scope of coverage and in the suggested method of financing. Under the most comprehensive health insurance proposals, virtually every kind of medical service would be covered, and under the least comprehensive, only medical expenses for catastrophic illnesses. Generally speaking, these important features are common to most if not all of the proposals: (1) Medicare and Medicaid would be absorbed or incorporated into the new proposals covering persons of all ages; (2) the poor and the near-poor (and under one plan, the unemployed) would be exempt from contributing toward financing, whereas other persons would be required to pay either on a flat

contribution basis or on a graduated schedule in terms of income; (3) the Federal tax system would be used as the financing vehicle, either in the form of payroll taxes and general revenues or in the form of income tax credits (Waldman, 1969).

Before discussing financing matters, it appears extremely important to consider disabled persons and their dependents in relation to the Medicare program. If the contributory Social Security system is based on the proposition that the economic security of a worker's family will be protected when contingencies of retirement, death, or disability occur, it seems illogical, that under Medicare, medical costs of the disabled are not covered when those of the aged are. This problem of disability was discussed in July 1969 in the Hearings on Health Aspects conducted by the Senate's Special Committee on Aging (U.S. Senate Special Committee on Aging, 1969c). Attention has also been called to the income maintenance implications of disability (Gordon, 1970).

With regard to financing, two central questions stand out. First, would the unit cost of health care for the elderly be less high through an insurance system which included the nonaged? Combining a high-risk group (the aged) with a less vulnerable group (the nonaged) would provide a spreading of cost over a larger number of people; thus, the cost per unit of care for the elderly would be smaller. For this reason it has been suggested that some form of comprehensive national health insurance system (NHI) be established with minimum delay.

Second, should the elderly after retirement be required to participate in the financing of health care programs? The answer to this question in part depends upon what kind of national health insurance would be adopted. If the new system is to be financed by payroll taxes and from general revenues, then the elderly would be participating only to the extent that they work and/or pay general taxes. But for today's elderly there is a time factor. If national health insurance will take several years, today's elderly do not have the time to wait for such a program. So, Medicare and Medicaid must be relied upon.

In discussing financing, only Medicare is relevant since Medicaid is a welfare program which is supported by State as well as Federal funding. Since January 1, 1971 under Part A of Medicare, the deductible on hospital bills is \$60. The elderly are currently paying \$5.30 per month in Part B premiums, but beginning July 1, 1971 the monthly premiums are scheduled to increase to \$5.60. Considerable indications point to further costs for the elderly.

It has been proposed by private individuals as well as by task forces appointed by the Federal Government that Medicare be expanded to include prescription drugs. Proposals have also been made that Parts A and B of Medicare be merged and that the coverage of insurable items of costs be broadened.

With a given amount of budget dollars at the disposal of the government, would the aged have first priority claim on them? There is wide recognition, of course, that investment in health care should be properly regarded as investment in human capital or resources. If such an investment is strictly based on cost-benefit calculations of dollars and cents, a serious question may be raised as to whether investment in the health of the elderly would be preferred to the same investment in other age groups. However, in cases where human suffering is involved, returns from investment strictly in dollar terms would probably be a questionable criterion. At the same time, it remains true that other groups of persons, notably the poor or near-poor, the nonaged, the unemployed, and the poor children would require serious attention and therefore offer strong competition for the health dollars that would be available. In sum, a very realistic problem of choice exists.

Before a full-fledged national health insurance can be implemented, the real hope of the elderly lies in improving Medicare and Medicaid. This would require merging Parts A and B of Medicare so that financing would be on the same basis as Part A. Improving Medicaid would offer substantial immediate benefits to the aged, and the disabled as well, if the latter were also included. The extended use of general revenues in the health care of the elderly and the disabled would be a forerunner of comprehensive national health insurance the Nation needs for all its citizens.

It should be added parenthetically that in February 1971 the Nixon Administration offered a variant plan of national health insurance (a National Health Insurance Standards Act) for consideration by Congress (U.S. House Document 92-49, 1971). Of interest here is that the Act proposes eliminating the Part II premiums now paid by the elderly under Medicare. Instead, the Administration proposes charging the elderly some \$5 to \$15 a day for every day after the 13th day in one hospital and the first \$50 for doctor services.

J. SPECIAL PROBLEM—HOUSING

Unlike medical costs which do not arise for everyone all the time, shelter is a basic need of all persons at all times. As pointed out earlier, housing cost was the largest budgetary item—estimated by the Bureau of Labor Statistics to comprise 36.4 percent of the intermediate standard budget for a retired couple in the spring 1969 (Appendix B.). Previous discussions of the effect of inflation also highlighted the tremendous increase in this component of cost of living. The problem of housing besets both the young and the old. But the elderly are especially affected since they generally have low current money incomes, and more of them have been homeowners during the period of rising homeownership costs. Obviously, elderly renters cannot escape the rising costs of housing either, because landlords frequently shift property taxes and maintenance costs to the tenants.

This tremendous problem in housing costs has prompted some 20 States today to offer property tax concessions in one form or another. The regressiveness of property taxes (in terms of their relationship to income) is explicit. Using Wisconsin as an example, tax-income ratio declines from 58 percent to 9 percent as income class rises from \$1-\$499 to \$3,000-\$3,499. Although tax burdens are less ominous in other states, they still are inordinately heavy. Minnesota's ratios range 49 percent to 5 percent as income moves upward with the same brackets as in Wisconsin. Relatively speaking, California and Oregon show a milder but similar tax burden (or a lower tax-income ratio) at the lowest income bracket, but the ratio is still exceedingly high, with property taxes absorbing about one-third of the average income in this bracket. Reported here are some highlights from a recent study of the property tax problem in these four States (Chen, 1970b).

Insofar as tax reductions are concerned, they do not amount to large sums in absolute terms. The largest amount of average tax saving among four states is \$299 in California in 1968, and the smallest, \$15 in Wisconsin in 1966. The average tax reductions range from \$27 to \$299 in California in 1968, from \$23 to \$117 in Minnesota in 1967, from \$65 to \$133 in Oregon in 1966, and from \$15 to \$156 in Wisconsin in 1966.

These comparatively minor sums of reduction in tax liabilities turn out to be highly significant when they are compared with the average income of low-income homeowners. For the lowest income group, the average reduction in taxes represents between 30 percent and 40 percent of the average income in California, Minnesota, and Wisconsin, whereas it still constitutes about 17 percent of the average income in Oregon.

Moreover, the percentage reduction in taxes as occasioned by these relief measures is very significant. The reduction ranged from 95 percent to 9 percent in California, from 69 percent to 13 percent in Minnesota, from 75 percent to 5 percent in Wisconsin, with Oregon's at approximately 50 percent.

The tax concession policy has been a powerful instrument in removing or reducing the regressiveness of property taxes as they relate to the *low-income* aged. In California, the after-concession tax burden takes on a progressive feature in terms of income. For the six income classes, from the lowest (less than \$1,000) to the highest (\$3,000-\$3,350), the tax-income ratio climbs steadily from 1.6 percent to 3.3 percent, 5.3 percent, 6.8 percent, 7.8 percent, and finally to 8.9 percent. This pattern is dramatically different from the regressive before-concession distribution.

In the case of Minnesota, the after-concession tax burden distribution exhibits a mildly regressive pattern which still differs drastically from the before-concession manner of

distribution. This experience is shared by Oregon, if we confine our attention at the moment only to the income range up to \$2,500. Finally, as for Wisconsin, the tax relief measure there nearly transforms a highly regressive tax into a proportional one, save for the lowest two income levels.

With regard to the policy of property tax relief for the aged, there is a basic concern as to how far this method can go toward solving the income problems of the aged. This question is raised because tax forgiveness to the aged is most likely at the expense of younger homeowners and taxpayers in general. Hard pressed as many of these taxpayers already are by taxes of all kinds in addition to the cost of living, they may resent and resist tax concessions for the aged.

Since property tax relief is offered in only 20 States (only three as far as renters are concerned), this approach as it now stands is of rather limited usefulness for all the elderly in the country. In view of the limited nature of this policy measure, what additional public policy actions could be taken? Since property tax increases have been largely a result of rising costs of education, welfare, general local government services, as well as price inflation, a basic remedy may well be found in restructuring the financing of local governments and of preventing or reducing inflationary tendencies. The revenue-sharing between the Federal, State, and local Governments that is now being considered may be part of an effective solution to the problem. To the extent that property taxes would be reduced as a result of revenue-sharing, this approach has the advantage of offering relief to *all* homeowners.

The preceding discussion of homeownership presented the home as the homeowner's liability, that is, as a subtraction from his income. But homeownership may also be viewed as an asset which carries an addition to his income as well. Homeownership gives rise to a degree of security and pride in old age. Economic security stems from "rent-free" shelter when the home is mortgage-free, or from "low-rent" shelter when the home carries a small mortgage. Imputed rental services represent an addition to the income of the homeowner. During inflationary times, the value of the services of the owner-occupied home presumably rises with its price level. Moreover, homeownership is a real asset that would serve as a protection against inflation because the value of a real asset generally tends to rise with inflation.

However, under existing institutional arrangements, the house must be sold and less expensive alternative suitable living quarters must be found if the benefits from its higher value are to be realized. An additional difficulty may be the psychological attachment that many older people seem to have for their homes and that may reinforce their resistance to selling. A dilemma exists because a major portion of older persons' real assets is in a form that is difficult for them to use to their advantage under present circumstances. What could be achieved by changes in public and private policy in order to solve this dilemma? A possible answer may lie in establishing a new institutional arrangement (Chen, 1970a).

If a financial mechanism could be established which would increase the homeowner's income by voluntarily converting equity in his home into currently spendable monthly payments for life while maintaining a lifetime guarantee of occupancy, the aged homeowner may then have a new option in his choice of housing as well as source of income.

Of course, if this proposal becomes a reality and elderly homeowners join the plan they would have less of an inheritance to leave to their heirs. The question would be: How important is it for the elderly to endure the hardships of income inadequacy in order to be able to bequeath? Further research on the attitudes of homeowners and on the possible financial mechanisms (involving private and/or public organizations) whereby such a proposal could be implemented seems called for.

However, since housing burdens are extremely heavy on a large number of the elderly and therefore require urgent attention, a possible way of relieving such burdens might be to explore what assistance the Federal Government could provide through grants to the local governments for this specific purpose.



IV. THE PRESENT SITUATION

A. PUBLIC PROGRAMS

1. Social Security

Social Security, Old-Age, Survivors, Disability, and Health Insurance, (OASDHI) is a basic program providing retirement income. In 1967, more than 60 percent of aged couples, and about 75 percent of aged nonmarried persons depended upon this program as their sole source of pension benefits (Kolodrubetz, 1970). It is both an economic and a social institution that has gained wide acceptance. It is a compulsory government program that provides for partial income replacement in the event of retirement, death, or disability, for those covered wage earners who have had a fairly normal and substantial employment history (though requiring only about five years for the current retirees) and have contributed to the program's funding. In other words, the loss of income is partially restored according to the idea of providing a basic floor of protection and on the basis of a presumed need. The partial replacement of income gives some recognition to differential earning levels and lengths of covered employment (individual equity considerations); it also provides relatively larger protection against income loss for those with lower earnings and for those with larger families (social adequacy objectives). The concept of earnings-related rights lies at the core of its general acceptance. Social Security also covers several contingencies, providing protection for the family as well as the individual.

Over the years, coverage and the number of beneficiaries under OASDHI have greatly increased. In 1950, only 65 percent of the persons in paid employment were covered; in 1960, the ratio went up to 88 percent, and to 90 percent in 1969. While 0.7 percent of the total aged population received payments in 1940, 6.2 percent of aged persons were on the rolls in 1945—a dramatic increase of nine times in a five-year period. A decade later, in 1955, 39.4 percent of the aged were recipients, representing a more than sixfold increase. In 1968, nearly 84 percent of older persons were receiving OASDHI benefits, more than doubling the ratio of 13 years before (See Table 29.). The phenomenal growth in the proportion of covered persons was not so much a function of coverage extension (not significantly increased until the 1956 Social Security amendment) as a function of "start-up" time following the inception of the program.

OASDHI affords a very significant basic income support. In FY 1970, it paid out \$28.8 billion in total benefits—\$18.9 billion to retired workers and their dependents, \$2.8 billion to disabled workers and their dependents, \$6.8 billion to survivors of deceased workers, and about \$.3 billion to special age-72 beneficiaries. There was a total of 25.8 million monthly beneficiaries—16.3 million were retired workers and dependents, 2.6 million were disabled workers and dependents, 6.4 million were survivors of deceased workers, and about 567,000 were age-72 and over persons—in a special category of uninsured beneficiaries who had no opportunity to become insured (See Table 30.).

While average monthly payments have increased during the past years, inflation has reduced the purchasing power of the higher benefits. For example, workers retired in 1950—in terms of 1970 dollars—had their average monthly benefits of \$78.10 in 1950 raised to \$89.50 in 1954, and \$90.60 in October 1970. Thus, a worker who retired in 1950 has barely held his own between 1954-70. If all retired workers with benefits in current-payment status are used as an example, the average monthly benefit was \$97.90 in 1960 (measured by 1970 dollars) and it was \$117.79 in October 1970, representing an improvement of about 20 percent in real terms. For a widowed mother with two children, in 1960, the average monthly benefit was

\$237.60 (in 1970 dollars), and it was \$255.80 in October 1970—an increase of about 8 percent in real terms. (See Table 31 as updated by Sanders, 1970.)

The above comparisons of average monthly benefit amounts on a year-to-year basis should recognize the fact that those amounts for more recent years include higher benefits paid to younger, higher-paid retirees as well as increases in benefit levels for those on the rolls from more distant years past. Therefore, insofar as those beneficiaries retired in the more distant past are concerned, the actual payments they receive may be overstated by these figures.

There are OASDHI recipients who receive Old Age Assistance (OAA) payments simultaneously because wage-related benefits and income from other sources (if any) combined are low enough to qualify them for public assistance. In 1950, 13.4 percent of all aged persons on Social Security also received OAA payments. This ratio has declined to an average of 7 percent in the last few years as a result of higher levels of OASDHI benefits (See Table 29.).

There are other public retirement programs. In 1967, about 1.5 million aged units received support from retirement programs for Federal (both civilian and military), State, and local government employees, and for railroad workers. Two-thirds of these units also received OASDHI benefits (Kolodrubetz, 1970). These public retirement programs (other than Social Security) may not have the growth potential of private pension plans (discussed in the next section) because presumably the number of government employees would not equal the number of workers in private industry. However, in 1967, when 1.5 million aged units received other than OASDHI public retirement pensions, only 1.8 million aged units were paid private pensions. At least as of 1967, public pensions other than Social Security deserve mention and proper recognition.

Social Security clearly is a basic program, but the present system contains certain features which have been regarded as undesirable by some though not by all students of Social Security. If there is no reform plan which aims at preserving the desirable and reducing the undesirable characteristics of the existing system, Social Security faces the dangers of (1) constantly being criticized by the conservative as well as the liberal for the weaknesses in its tax-benefit framework, (2) gradually causing everincreasing tax burdens on the workers, especially those who are young and those with low earnings, and (3) possibly developing into another public welfare measure which runs counter to the original objective and, more significantly, to the commonly held belief of a self-supporting group protection program.

Many features of the present tax-benefit structure call for change. One candidate for reform is the regressive payroll taxation. Although the well-entrenched beliefs of earned rights and self-support have made past increases in Social Security taxes acceptable to a large number of persons in the system, further raises in the rates may represent too great a burden for the low-earning individuals and families.

As a possible substitute, general revenue financing, which is progressive on the whole, possesses the advantages of relieving regressivity, injecting more effective income redistribution, and contributing to fiscal stabilization. However, there are offsetting disadvantages, such as (1) removing the foundation of self-financing and thus the feeling of earned rights, (2) losing the basis of "cost control" or the fiscal discipline on benefit increases, (3) having to compete with other users of general revenue, and (4) compelling the high income individuals and corporations to contribute a good deal more (due to progressivity alone) to a system which was predicated upon self-help. These considerations have prompted some writers to suggest that future benefit increases, which are particularly weak as related to contributions, be financed by general revenues, leaving the existing (regressive) tax system unaltered (for example, Eckstein, 1968).

Other analysts are far more impressed with the virtues of general revenue financing than its problems. Some of these persons would advocate strongly the use of general revenues, but others in this group would concede to suggestions of (1) refunding the payroll tax to workers with incomes below poverty, (2) allowing individuals to credit all or part of their payroll taxes against their personal income taxes with refunds for those whose payroll tax

credit exceeds their income tax liabilities, (3) using a vanishing exemption for payroll tax purposes, and (4) possibly integrating the Social Security system with an improved system of transfer payments to the poor (Pechman, Aaron, and Taussig, 1968).

However, using general revenues as a supplement in the manner described above would reduce regressivity of the present tax structure rather insignificantly. Moreover, these refund and credit devices would make the Social Security benefits paid to low-income persons a "de facto" welfare payment. By contrast, nothing would change the complexion of Social Security more than a complete replacement of payroll taxes with general revenues. This would result in an overt system of public welfare. There is a serious question as to whether or not the American public is ready to accept either a "de facto" or an overt system of Social Security with such a strong scent of welfare.

Following is a list of frequently mentioned or discussed possibilities for strengthening the present program.

(1) One effective way of reducing the regressivity of the Social Security tax would be to raise significantly the taxable wage ceilings (\$7,800 at present).

(2) A provision for relating benefit payments to the length of time of employment or to the period of contributions would provide incentive for persons to remain in the labor force longer than they might otherwise.

(3) A policy to relax (perhaps gradually on a timetable) the earnings test for benefit receipt would gradually remove the disincentive effect on work-leisure choices (Schulz, 1971). It would also eliminate the rather common and underhanded practice of older workers remaining at work for wages below the level which the present earning tests allow, to avoid losing some or all of their Social Security benefits.

(4) If women workers regardless of their marital status were to receive benefits in their own right as contributors to Social Security, depending upon the history of their attachment to the labor force, the allocation of resources would be improved as it relates to women. So long as a woman is entitled to benefits from her husband's earning record, her scale of choice between work and leisure may tip in the direction of leisure. Of course, work-leisure choice of a woman (as well as that of a man) is not very significantly affected by Social Security taxes and benefits in and of themselves. But this observation points to a capricious, "discriminatory" element against the present working wife, in cases (more frequent than not) when her own earnings are lower than those of her husband. In such a case, she would be entitled to less benefits than those she would receive as a wife. At present, she only receives whichever benefit is higher. Under the existing system, this type of treatment "discriminates" against those women who work for a few years before marriage and who resume work after the child-rearing period—a pattern quite prevalent in America. As an alternative, it has been proposed that credits toward Social Security be based on a husband-wife combined basis.

(5) A policy that would tie Social Security benefits to some type of a price index (e.g., Consumer Price Index) would preserve the purchasing power of benefit receipts.

(6) Methods, which would enable Social Security beneficiaries to share in the fruits of economic growth, could deal with the question of having benefits keep pace with inflation and productivity—a question discussed above.

2. Public Assistance and Other Public Programs

When it was first created in 1935, Old Age Assistance programs were designed to be a joint Federal-State-local program providing relief for the aged, along with other welfare programs coping with the poverty problems among all the poor. It was expected that eventually OAA would diminish in importance as the wage-related Social Security system offered more protection to the workers under its coverage.

However, the number of persons on OAA rolls continued to rise from more than 1 million in 1936 to more than 2.5 million in 1955. But since 1955, the number of OAA recipients has been declining continuously to about 2 million as of March 1970. In 1936, the average monthly payment per recipient was \$18.80; it rose to \$75.10 in March 1970. Thus, the average payment per person has kept up with the rise in the price level in the last 10 years. The total average payment (for the country as a whole) amounted to a little over \$900 a year as of March 1970. OAA payments vary greatly among the States, ranging in March 1970 from a low of \$46.65 in Mississippi to a high of \$115.05 in California. (All statistics are taken from *Social Security Bulletin Annual Statistical Supplement, Social Security Bulletin (1968)* and "Current Operating Statistics," *Social Security Bulletin (1970b)*). Since about one-half of OAA payments are paid to supplement the low benefits of some 7 percent of the Social Security beneficiaries, the average monthly payment under OAA is lowered for that reason.

Because existing OAA programs are operated by various State and local governmental units, they vary greatly in terms of financing bases, administrative procedures, standards of eligibility, coverage of beneficiaries, as well as level of payments as cited above. At present, about 2 million older persons receive income from OAA. Of this total, 57 percent also receive some Social Security benefits, whereas the remaining 43 percent are totally dependent on OAA (and other minor sources of support from relatives and friends, if any). Without the welfare program, the aged as a group would no doubt be poorer than they are now.

Despite its contributions to the income position of the elderly, OAA, along with other welfare programs, has met a large number of criticisms from many individuals and study groups, such as the President's Commission on Income Maintenance Programs, the Committee for Economic Development, and others, on grounds of financing, administration, and related problems. Consensus exists as to reforming the existing welfare system, disagreements exist as to how.

If the elimination of poverty by providing a "minimum adequacy" level of income is to be assured under a public program, there could be a number of policy options, such as improving the present OAA, extending the existing Social Security to cover OAA cases, instituting some form of negative income tax, or establishing a nationally administered, nationally financed Federal assistance program along the line of the Family Assistance Plan as proposed by the present Administration.

The existing OAA programs are operated by various State and local governmental units. While it is possible to improve the existing programs, a successful revamping of the system would appear very difficult because of the widely diffused governmental jurisdictions having a general problem of revenue sources and different degrees of inclination toward reform.

Another alternative would be to use the existing Social Security program to perform the function of fighting poverty. Social Security is without question a most effective income-transfer mechanism which can deliver incomes very quickly. However, this approach to solving the problem of poverty raises some fundamental questions about the nature of Social Security.

As pointed out earlier, Social Security is generally regarded as a contributory system for providing partial income replacement in the event of old age, death, or disability for those covered wage earners and their families. These wage earners have had a fairly normal and substantial employment history and have contributed to the program's financing. Social Security can prevent or reduce poverty as it moderates the decline in living standards by partial income replacement. However, the role of Social Security in fighting poverty is merely

incidental to its role in partially restoring income losses. Attempting to use Social Security as a means of fighting the poverty (or providing minimum adequacy of income) among those persons who receive meager Social Security benefits because of very limited labor force participation or nonparticipation would raise basic questions concerning benefit levels and financing methods.

Unless one is prepared to impose additional taxes upon the workers and their employers, as well as on the self-employed, Social Security could not be expected to make payments to the poverty-stricken. Social Security taxes already are quite burdensome on young and low-wage earners; imposing additional taxes to make Social Security a poverty-fighter would further raise the burden to an extent that may prove difficult to bear by some if not many younger participants in Social Security. Some fear that such an extension of the role of Social Security may so undermine the contributory nature of the system as to make the program unpalatable or even unacceptable to the worker-participants.

To remove the problem of heavier tax burden, it may be suggested that general revenues be used as a funding basis. This is a possibility. However, when general revenue funds are transfused into Social Security, the wage-relatedness and the contributory feature would be blurred. Since it appears that the earnings-related rights to Social Security benefits, more than any other characteristic of the system, lie at the core of public acceptance, some observers feel that the support of the system will not be substantially reduced as a result of general revenue financing.

Still another alternative would be to institute some form of negative income tax (NIT), under which persons or families whose incomes are below a certain level would receive payments from the Federal Treasury either on a flat rate or a graduated basis (the latter depending upon the degree of the income gap between their income and the level of income negative income tax supports). The NIT approach to solving the problem of poverty in the general population (with its incidental result of providing "minimum adequacy" level of income for the aged has gathered considerable support in recent years. This approach utilizes the general revenues of the Federal Treasury, and it has several commendable attractions such as simplicity and widespread coverage. As a national program to fight poverty, however, NIT (as a generic term to describe its many variants) is not free of certain problems. One difficulty of as yet undetermined magnitude relates to the potential adverse effect on the incentive to work. A more important difficulty has to do with setting the level of minimum support under NIT. If the payments to all the poor persons and families are set at the current poverty threshold incomes, the program cost would be so large as to result in a very significant income redistribution. The redistributive process thus involved is most likely to impose on the middle-income groups a rather large burden if NIT is erected on the Federal income tax base now in existence. If the size of income redistribution is reduced so as to make it economically and politically acceptable to the majority of taxpayers, then NIT would fall short of its purpose of eradicating poverty because reduction of income redistribution requires setting NIT payments below that which would be necessary. Of course, the incentive issue is of little or no relevance with regard to the retired or the aged as a group. But payments under NIT are of great concern in assessing its effectiveness to remove poverty. This leads to the final alternative discussed in this section.

It may be argued that a nationally financed, nationally administered Federal assistance program along the line of the Family Assistance Plan (FAP) is a viable alternative. As compared with the three alternatives discussed above, an approach like that of FAP would remove the fragmentation in administration, unevenness in coverage, and the differentials in payments which are the major problems with OAA. It would not impose a role of income guarantor on Social Security for persons with little or no wage-related contribution into the system's funding; it would reduce the possible or potential disincentive effects on work efforts which NIT might bring about, because the FAP approach stipulates the requirements of work on certain individuals, and it would utilize general revenues. Since the concern here is with the

aged, it is the adult categories of FAP which hold the central interest. However, FAP as an overall instrument to remove poverty has the advantage of not singling out a particular population group for special treatment.

B. PRIVATE PROGRAMS

1. Private Retirement Plans

Private retirement plans today are a very important economic and social mechanism for providing income in old age. They have shown significant growth since 1950, when pension plans first became accepted as a proper issue for collective bargaining as a result of a decision by the U.S. Supreme Court in the *Inland Steel* case in 1949.

Private retirement plans consist of pension plans and deferred profit-sharing plans. A private pension plan is generally defined as a plan established by an employer, union, or both, that provides cash income for life to qualified workers upon retirement. Benefits are usually financed by regular contributions from employers (noncontributory plans), and in some cases, from employees as well (contributory plans). Under deferred profit-sharing plans, on the other hand, contributions and benefits depend upon the profits of the employer and are therefore not determinable in advance.

In 1968, 28.2 million employees were covered by private pension and deferred profit-sharing plans; whereas 9.8 million were covered in 1950 and 21.2 million in 1960. The percentage of covered employees of wage and salaried workers in private industry grew from 22.5 percent in 1950 to 32.2 percent in 1960, and to 47.2 percent in 1968. As coverage has grown, so has the number of beneficiaries—450,000 in 1950, 1.8 million in 1960, and 3.8 million in 1968. Benefit payments have likewise increased over the years, rising from \$370 million in 1950 to \$1.8 billion in 1960 and to more than \$5 billion in 1968 (See Table 32.). Because new plans were established, the rate of growth in the 1950's, either in the number of covered employees, or in the number of beneficiaries, or in the amount of benefit payments was much greater than in the 1960's.

The above comparative historical statistics convey the impression that private retirement plans have gained considerable ground in terms of their support for the aged in retirement. The most recent "1968 Survey of the Aged" (Bixby, 1970) shows the extent to which private pensions contributed to the income of the aged in 1967. In that year, 19 percent of married couples, 13 percent of nonmarried men, and 5 percent of nonmarried women received private pension payments. More than 95 percent of private pension beneficiaries also received OASDHI benefits.

The significance of private pension payments may also be appreciated by reviewing the extent to which they have raised the income levels of those who receive them. Actually, private pensioners are a group of the economically advantaged among the aged, since their 1967 median total income, as shown below, was more than \$1,000 over that of those without private pension income.

Aged population (1967)	Median income		
	Married couples	Nonmarried persons	
		Men	Women
With private pension income	\$4,255	\$2,580	\$2,330
Without private pension income	3,080	1,520	1,200

The median pension payment in 1967 was about \$900 a year. Private pensions were an important source of income for those in the higher income brackets—25-30 percent of married couples in the income levels of \$3,000 or more received such payments; 16-23 percent of

nonmarried persons in the income levels between \$2,000 and \$5,000 had pension payments (Kolodrubetz, 1970).

Private retirement plans have indeed made a very significant contribution toward income maintenance in retirement. While further growth of these plans may be expected, the rate of growth in the 1960's was slower than it was in the 1950's. This slower pace suggests that the most accessible groups of workers had already been covered and that it would be difficult for a large proportion of workers (mainly in small- and medium-sized businesses) to obtain private retirement income protection (Heidbreder, Kolodrubetz, and Skolnik, 1967; Schulz, 1970b). A more recent study shows that growth of coverage under private pension plans during the 1960's was primarily attributable to the growth of employment in companies where such plans had already existed (Davis and Strasser, 1970).

The fact that private pensions were an important source of income for those in the higher income brackets, together with the earlier reference to the relatively small number of aged who received private pensions as the economically advantaged, raises several important issues. One is the gap between the large number of employees covered and the relatively small number of pensioners, which can be explained in large part by "vesting" and eligibility requirements. A related and more fundamental question relates to portability of pension rights.

Vesting refers to the right of a participant of a pension plan to receive his accrued pension benefits if he leaves the plan before he is eligible for retirement benefits. Until the mid-1950's vesting provisions were limited largely to contributory plans not under collective bargaining. The prevalence of vesting has been on the rise since the initial successful efforts of the United Automobile Workers Union (1955) and the United Steelworkers (1957) to add a provision for vesting. It was estimated that 25 percent of the plans had vesting provisions in 1952, 60 percent in 1954, 67 percent in 1962-63, 74 percent in mid-1967, and 77 percent in 1969 (Landay and Davis, 1968; Davis and Strasser, 1970). It bears emphasis that even now about one-quarter of the plans do not have vesting provisions.

Not only has there been an increase in vesting provisions but they have also been liberalized, even though vesting requirements remain rather stringent. Of those plans with vesting in 1969, only 1 percent provided vesting with less than 5 years of service; 45 percent with 5-10 years of service; 39 percent, 11-15 years; 12 percent, 16-20 years; and 3 percent required more than 20 years of service. In addition to the minimum service requirement, slightly less than half (49 percent) of the plans also had an age requirement for vesting. Of those plans with age requirements, about one-half required 40 years of age or less while the other half required more than age 40 (Davis and Strasser, 1970). Vesting provisions are further distinguished between deferred full vesting (in about 70 percent of the plans in 1967) and deferred grading vesting (in the remainder of the plans), while immediate full vesting (no waiting period) is extremely rare (Landay and Davis 1968).

The slowing down of pension plan growth has been due to the fact that the most accessible groups of workers have already been covered. The reason that workers in small- and medium-sized enterprises are not covered by similar plans can be explained by the cost of initial establishment and subsequent administration of such plans.

It seems entirely likely that if financial mechanisms were available to facilitate such establishment, the adoption of pension plans would be accelerated.

The Industrial Union Department (IUD) of the American Federation of Labor-Congress of Industrial Organizations (AFL-CIO) has designed a National Industrial Group Pension Plan (NIGPP) for small plants, which is made available to unions to provide retirement income for their members. Currently 24 unions are using this program in varying degrees. There are at present more than 180 units covered, each unit having slightly less than 40 employees on the average. Contributions from all units total approximately \$200,000 per month. Funds under these plans are received and invested by the funding underwriters; at present, only five funding underwriters are involved. Originally (May 10, 1966), the trustees of the National Industrial Group Pension Trust Fund appointed the Prudential Insurance

Company as administrative agency for the plan. In addition, the following insurance companies are also designated as funding agencies: Aetna, Bankers of Iowa, Connecticut General, Equitable, John Hancock, Mutual Benefit, Mutual of New York, State Life, Travelers, and Union Central (Young, 1966).

The basic goals for developing NIGPP were the achievement of low expenses, simplified administration, simplified bargaining mechanism for employers and unions, flexibility of benefit levels and contribution rates, flexibility in admitting new groups or changing the participation basis of groups, and maximum pooling of experience and protection of benefit expectations. In short, the goals are simplification, flexibility, and protection. This approach is desirable and should be studied, even though the experiences under this plan have not been overly encouraging in view of the relatively small number of participating units.

Pension portability refers to the transfer of pension rights from one plan to another when a worker changes employment. The question of pension portability is intimately related to the nature of pension payments. If pensions to a worker were considered as gratuities from an employer as rewards for loyal service over a long tenure, the question of an employee's rights to his pensions theoretically would not even exist either under voluntary or involuntary termination of employment. However, if pensions are viewed as part of a worker's compensation, consisting of current payment of wages, deferred payment of wages in the form of retirement pensions, and other health and welfare fringe benefits including paid vacation and the like, then the question of pension portability takes on a new dimension.

Either voluntary or involuntary departure from employment may disqualify a worker for any rights to a pension if the worker has not met the age and/or service eligibility for vesting. A worker who voluntarily quits the job may not be too concerned with forfeiting part or all of pension rights because presumably the new employment has offered better terms. However, for a worker who is involuntarily discharged from the job, forfeiture of pension rights will certainly add to the aggravation of job loss. In either case, so long as pensions are part of a compensation package, giving up of that portion of wages that is deferred raises the question of equitable treatment of workers with shorter tenure and younger ages vis-a-vis those with longer tenure and older ages. Trends toward more liberalized vesting requirements, as cited earlier, do not offer protection to a large percentage of workers who average less than ten years in a job. It is recognized that a payment for employee benefits (including pensions) is just as much a production cost as is a direct payment for wages (Moore, 1970). In that light, there is a strong case for portability of pension rights as well as for much more liberalized conditions for vesting. However, it should also be recognized that age and service eligibility requirements for vesting have been argued in terms of flexibility and choice in pension planning.

In the public sector, Social Security is the best example of complete portability because credits toward benefits under the system accumulate for the worker no matter how many times he changes jobs. In the private sector, Teachers Insurance and Annuity Association (TIAA), for example, offers the same system for university teachers and researchers to carry their pension credits from one college to another. Even if portability is considered as a desirable goal, there is the problem of implementing it. The private pension system consists of a number of more or less basic patterns, but with large numbers of variations under each pattern.

Despite the difficulties of implementing it and arguments about its merits and demerits, portability has been a key issue in the pension literature. In the last several Congresses, bills on the subject have been introduced in both the House and the Senate. Portability promises to be an active issue in the coming years, along with continued efforts in behalf of early vesting and sound funding.

2. Private Savings

As an additional source of financial means in retirement, private savings are represented by "income from assets," as shown in Table 7. Statistics on this source should be interpreted with care, according to the discussions in Section III.C.1., mainly because of incomplete data (often a problem of underreporting) and the methods used to remedy this problem.

In 1958, income from assets was estimated to be between 14 and 23 percent of the aggregate income received by the aged. As pointed out in Section III.C.2., this broad range is probably the result of lack of complete data and the inclusion of contributions from relatives and friends.

The data for 1967 relating to income from assets require special attention. Income from assets has been shown to be 15 percent of aggregate income of aged persons and their spouses (See Table 7.). This suggests a remarkable stability during the decade 1958 to 1967 in contributions made by asset-generated income toward the total income of the aged. However, the recognition of substantial underestimation of income from assets has led the Social Security Administration to assign this source a much larger proportion of the total, 25 percent as opposed to 15 percent for 1967.

Thus, over a period of five years "income from assets" rose from less than \$6 billion in 1962 to more than \$15 billion in 1967. This is an extremely dramatic increase as compared to the increase in the aggregate income over the same time period (from \$35-38 to \$60-61 billion) which is itself very substantial. Because of the growth in the number of aged units and the increase in the price level per aged unit, *real* income is a more meaningful measure. On that basis, the average income from all sources per aged unit went up by 30 percent in real terms as discussed in Section III.C.1., whereas the average income per aged unit from assets rose by 122-124 percent in real terms. While this rise could be considered a highly encouraging sign, it also raises the doubt that the estimate on income from assets for 1962 was substantially understated, as previously discussed.

Although it may be agreed that individuals should be encouraged to save for retirement because private planning allows for preferences and flexibility, there remains the all-important question of whether they are financially able to do so assuming they are willing. For a large number of people it can be rather difficult to save for their old age because of a variety of financial obligations, such as buying and replacing household durables, paying off mortgages or making rental payments, paying for various insurance premiums, medical and educational costs, in addition to contributing to the treasuries of all levels of government. This does not include daily living expenses such as food, transportation, and the like.

The advantage of private savings for retirement use should be considered along with the disadvantages of this method. There are several drawbacks that affect the stability and accessibility of savings. Savings may be used up before retirement, for medical (costs not covered by insurance) and other emergencies if not for pleasure. Another drawback concerns people with modest means who typically save in those forms of financial assets (savings accounts, savings bonds, for example) that do not appreciate in value beyond interest payments and that, in fact, might depreciate in terms of purchasing power during inflation. Still another drawback exists. For a large number of people any substantial amount of savings is in the form of home equity which is locked in the house so long as homeownership is maintained.

Another drawback to reliance on private savings may be a lack of will to save on the part of some individuals and families. But that willingness may be enhanced if individuals are better able to save. Although ability to save does not ensure action, inability to save surely guarantees inaction. If conditions become more favorable for private savings, they could guarantee more support for retirement income. For example:

- (1) The tax systems currently in use at the State and local levels, which often are regressive and impose a heavy drain on the financial resources of many individuals, could be reformed.

(2) The occurrence of uneven, unpredictable, and sometimes catastrophic medical expenses that may drive persons into poverty, or at the very least make them financially insecure, could be prevented by some form of national health insurance.

(3) Public policy to prevent inflation or to reverse inflationary tendencies once they appear could be more effective so as to preserve the value of personal savings and therefore encourage more savings. As a hedge against inflation, the perennial suggestion of a Constant Purchasing Power Bond deserves more than just another mention.

(4) Savings in the form of house equity—a good protection against inflation—could be utilized when more types of shelter would be available or when savings in this form could be utilized without an outright sale of the house.

(5) Income tax provisions could be revised to offer inducements to savings for retirement. Exclusion from taxation of payments made into a retirement fund, public or private, and inclusion in taxable income of withdrawals from that fund during retirement would provide such inducements. It should be emphasized that this suggestion applies only to retirement funds but not to all savings. To the extent that this practice would reduce income tax receipts to the Treasury, such reductions could well be justified in terms of the social purpose that is served by this approach. Not only would this kind of tax treatment enhance individual incentive to prepare for retirement income, but it would also improve the ability of many persons to accumulate more funds during their working years for retirement needs.

Either as a substitute or as a supplement to pension plans, individual savings programs restricted to retirement use (with penalty stipulated for withdrawals before retirement, similar to the "Registered Retirement Saving Plan" in Canada) should be further studied. These programs could be handled through existing financial intermediaries. With a view to protection from inflation, individual restricted savings programs (handled by existing financial intermediaries) could also use the variable annuity approach by linking such savings with a mutual fund mechanism.

C. EMPLOYMENT

Employment as a source of income after age 65 has declined in its importance over the years. Nonetheless, employment still has a very important effect on the income position of older persons. For example, in March 1970, families headed by an aged person had a median income of \$4,803 which was a little more than 50 percent of the median income for all families. Unrelated aged individuals had a median income of \$1,855, a little more than 60 percent of the median income for all single persons. Employment greatly enhanced the income position of these categories. For aged families headed by a full-time worker, the median income was \$8,935, which was slightly more than 80 percent of the median income of all families headed by a full-time worker. Aged single individuals who were full-time workers had a median income of \$4,687, which was 75 percent of the median of all full-time working single persons (See Table 33.).

There are likewise differences between men and women in terms of income position as it is affected by employment. In March 1970, the median income of aged males was \$2,828, about 44 percent of the median income of all males; median income of aged females was \$1,397, about 65 percent of the median income of all females. Employment once again, as expected, improved the income position of the aged, both absolutely within their own age group and relatively to other age groups. The full-time working aged men had a median income of \$6,581, almost 75 percent of the median income of all men working full time. So far as

aged women are concerned, full-time workers median income was \$4,705, more than 90 percent of the median income of all full-time working women (See Table 34.).

The above information may be supplemented by the "1968 Survey of the Aged," (Bixby, 1970) which contains revealing statistics of persons as to marital status and full-time or part-time work. The 1967 median incomes of those who did not work (married couples, nonmarried men and nonmarried women) amounted to about one-half the amount for those who did, confirming the Census Bureau data cited in the preceding paragraph. Nonmarried women had the lowest median income in 1967, \$1,162. This general pattern also existed in 1962 when statistics were available for median incomes of those who usually held full-time jobs as opposed to those who usually worked part time, as well as for those who did not work at all.

Because of the way in which median income statistics for 1962 and 1967 were reported, that is, differently for those with work experience, it is difficult to assess the changing income status of this group of the aged. However, an inspection of the data suggests that the working aged improved their median income position only slightly between 1962 and 1967. In fact, they may have lost some ground in terms of purchasing power. By contrast, during the same five-year period the median income of the nonworking aged went up more than 11 percent for married couples, more than 23 percent for single men, and almost 25 percent for single women. While the nonworking couples held their own in terms of purchasing power, the nonmarried men and nonmarried women improved their real median income by more than 12-15 percent (See Table 35.). These statistics suggest that working may be an ambiguous virtue so far as improvement in income position is concerned. Of course, it should be realized that the nonworkers were able to improve their income status only because they were covered by OASDHI which has provided higher benefits. Had the working aged not been in the labor force, their financial resources would have been even lower. As a matter of fact, many of the aged find it necessary to work simply because their Social Security payments are nonexistent or too low. On the other hand, there are also some aged who forego Social Security benefits because they work for reasons other than economic or whose employment enables them to receive income in addition to Social Security.

While income from employment is of course highly desirable, employment in old age as a means of bolstering financial status is unlikely to be of major significance. Aside from the fact that earnings as a percentage of the total income received by the aged have declined during the last decade, the following review of the labor force status of the aged suggests that only relatively low expectations should be attached to employment as a purely economic matter in old age. Working for reasons other than economic would be an entirely different situation.

In 1970, aged persons numbered just under 19 million. Seventeen percent were in the labor force with 83 percent out of the labor force. One-half of 1 percent were unemployed (See Table 36.). The great bulk of the elderly who worked were employed in nonagricultural jobs. Of these, approximately 2.4 million, more than 57 percent, had a full-time job; almost 40 percent worked part time by choice; and a little more than 3 percent held part-time jobs but would have liked to work full time.

Among those more than 15.7 million remaining aged persons not in the labor force, nearly 15.4 million gave such reasons for not working as ill health, keeping house, and retirement. There were 97,000 persons who thought they could not get jobs; for convenience sake, they may be described as "Type I discouraged job-seekers." In addition, there were 282,000 persons who gave an assortment of reasons for not being in the labor force. Since no data are available as to how many of this latter group were too discouraged to seek jobs, about half of them (probably too large an estimate) may be termed "Type II discouraged job-seekers," again for the sake of convenience.

When the numbers of aged persons who are unemployed (104,000) and others on "involuntary" part-time jobs (81,000) plus the two types of discouraged jobs seekers (Type I, 97,000 and Type II, 141,000), the total number of aged persons who might be assisted by increased employment opportunities in 1970 was in the neighborhood of 423,000. This

number represents more than 2 percent of the aged. While it would increase the ranks of the employed aged by more than 13.5 percent, it would also reduce the number of the unemployed aged to zero as a result (See Table 37.).

To view the employment problem of the aged in proper perspective, it may be enlightening to compare it with the status of younger persons (16 to 64 years of age). In 1970, the aged represented 13.9 percent of all persons 16 years old or over. The unemployed aged constituted only a little over 2.5 percent of the total unemployed. The number of aged "involuntary nonagricultural" part-time workers made up 3.7 percent of all workers in this category; aged "Type II discouraged job-seekers" were 9 percent of the total. In all three groups, the share of the aged in the employment problem was less than their share of the total population 16 years old or older. However, with respect to "Type I discouraged job-seekers" more than 15 percent of the total were among the aged, showing a ratio for the aged that was larger than their share of the total population 16 years old and over. Moreover, this proportion was much larger than those other three ratios just cited above.

It should be mentioned that there is a Background Paper on "Employment" (1971 White House Conference on Aging) which discusses this subject in much more detail.

D. A SUMMARY OF THE PRESENT SITUATION

During the last decade or so, the aged as a group have improved their economic status as measured by the decline in the incidence of poverty, by the rise in median money income (despite declining labor force participation and the consequent increased leisure, whether voluntary or involuntary), or by the increase in average asset holdings (real assets in the form of homeownership and financial assets).

This improved status has resulted in part from (1) larger Social Security payments, (2) the spread of private pension plans, (3) the partial absorption of medical and hospitalization costs by Medicare and Medicaid and other programs, (4) the various special income and property tax exemptions (and other subsidies), (5) more ample private savings and investment incomes (in spite of greater compulsory saving under Social Security which might have led to reduced private savings), and (6) public assistance.

This gain in economic status may be considered a noteworthy, if not remarkable, achievement, having been accomplished without any well coordinated policy regarding the Nation's aged population. According to the "Technical Guide for Community and State White House Conferences on Aging," (White House Conference on Aging, November 1970, p. 1).

The 1971 White House Conference on Aging is projected as a serious and difficult undertaking. The principal task . . . is to arrive at a carefully weighed, comprehensive system of national policies which will give direction to action on behalf of older people at national, State, and community levels.

The first recommendation of the Senate Special Committee on Aging in its recent report (1970c) is that "we maximize the opportunity provided by the 1971 White House Conference on Aging to develop a basic national policy and the commitment essential to carrying out this policy (p. 5 emphasis added.)

Although the economic position of the aged as a group in the last 10-12 years improved greatly in absolute terms (having shared in the rising income brought about by a growing economy), other age groups enhanced their economic status to a greater extent. Therefore, the economic position of the aged has worsened relative to that of the rest of the population. The price inflation since 1965 has helped to account for this deterioration.

Had the Nation had a basic national policy toward the aging during all this time, the aged might have been better situated economically vis-a-vis the nonaged. The improving economic circumstances of the elderly in the last decade relate only to them *as a whole*. As made clear in Section III, certain subgroups among the aged have fared very poorly either in terms of poverty rates, money receipts, or asset holdings. Had a basic national policy toward

the aging been in existence, these subgroups of the aged no doubt would have been more favorably circumstanced economically vis-a-vis other subgroups in the same bracket.

Therefore, the keynote on the present income position of the elderly may be characterized by *urgency and hope*. The situation is urgent because unless a comprehensive national policy of income maintenance is formulated soon, the retirement income position of the aged will lack the kind and degree of adequacy and security which would help to make retirement the "golden years." The situation is hopeful because this Nation possesses not only the ingenuity but by now also the awareness of the real dimensions of the problem with which to design and implement the long overdue national policy.

(1) *The first element of a basic national income policy would seem to be the elimination of poverty among the aged (and others), as poverty is officially defined.* This is the minimum adequacy level of income discussed in Section III. A.

(2) Another important ingredient in such a comprehensive retirement income policy would appear to be the *creation and maintenance of financial mechanisms which would help provide a reasonable relationship between postretirement income and preretirement income*, and which would also help provide a reasonable relationship between income of the retired and the income of the working population in general. This is the relative adequacy level of income also discussed in Section III. A.

(3) Still another component in a national income policy for the elderly would call for *providing the opportunity for considerable individual decisionmaking (to complement collective, compulsory decisionmaking) to accommodate personal preferences and initiatives.* This is the "maximum adequacy" level of income referred to in Section III. A.

Eliminating poverty rather than working toward greater equality of incomes appears as a worthy immediate goal of public policy. Discussions in Section III. F., amply document the high and uneven incidence of poverty among the aged today, despite the very significant decline in the poverty population, aged and others, since 1959. The last columns in Tables 11 through 16 show that, of all poor families, those headed by persons 65 or over and those headed by people under 25 increased their incidence of poverty from 1968 to 1969 when all other age groups reduced their poverty. Of all the male-headed families, the 65 or over group was the only one that registered an increase in poverty. Of all the female-headed families, the 65-and-over group, along with the under 25 and the 55 to 64 groups, recorded increases in poverty when the other three age groups experienced declines. Of all the unrelated individuals, the 65 or over group did show *decline* in poverty when several other age groups showed increases. All of these increases and decreases were taking place during one year, from 1968 to 1969. Although caution should be exercised in interpreting changes during one year's time because of sampling variability and response rates and response errors, these statistics do offer some basis for discouragement or pessimism, though perhaps not despair.

As noted earlier in Section III, single women and widows are among those with the lowest income position, and they deserve special attention. The three classes of aged single women have the lowest income status. In 1967, the median income of nonmarried female Social Security beneficiaries was \$1,297, while that of the nonmarried female nonbeneficiaries was \$1,032. In 1962, the median income of the "retired" among the nonmarried women was \$1,300, and that of the "widowed" among the nonmarried women was \$1,105. In 1967, these two groups had median incomes of \$1,412 and \$1,230, respectively (See Table 38.).

Reviewing the trend from 1962-67, among Social Security beneficiaries, the current money income of married couples went up by some 18 percent, that of the nonmarried men, more than 25 percent, and that of the nonmarried women, staying about the same level—all

measured by the median. In terms of purchasing power, between 1962 and 1967, the median income of the first two groups improved by 8 to 15 percent, whereas that of the last group *declined* by about 10 percent. (Calculations based on Table 38.)

As discussed in earlier sections on income adequacy and public assistance, the most promising policy to remove poverty from the land would seem to be a nationally financed, nationally administered Federal assistance program along the line of the Family Assistance Plan, which was brought up in the 91st Congress and which is certain to be debated in the current 92d Congress.

At the present time, Social Security supplemented by other sources is the mainstay of income support for old age. Social Security has lifted a large number of aged persons out of poverty, but despite these payments, many aged are still poor. As pointed out earlier, these poverty cases should be handled by a program designed to remove poverty.

Because of higher levels of earnings in recent years and expected further improvements in earning potential, retired workers and/or their families of tomorrow are expected to receive higher benefits from Social Security, which is an all-important program. While this expectation may only be a modest one, since the maximum amount of taxable earnings, if unchanged, will cover a declining proportion of the actual wages earned (see Table 39.), taxable earning ceilings will most likely be raised as in the past. Another reason for a modest expectation is the continuing trend for workers to retire early and hence receive only reduced benefits. On the other hand, a more favorable development is the higher percentage and longer participation of women in the labor force along with higher wages and salaries they will earn.

The preliminary data for 1968 show, for example, that 31 percent of the annual earnings of all *male* workers was not creditable toward benefits for Social Security, but only 3.5 percent of the annual earnings of all *female* workers was not subject to the Social Security payroll tax (See Table 40.). This reflects the lower earnings by women as well as the relatively smaller number of women in the higher wage brackets. If the maximum taxable earning levels are raised in the future, all workers who receive considerably more than the present \$7,800 will have higher benefits based on greater contributions toward the program. Even without upward adjustments in taxable earnings, an unlikely event, female workers may expect higher benefits as their earning power rises with longer work histories and anticipated higher pay scales.

A significant problem with the present Social Security system is the lack of automatic adjustment mechanisms for rising prices and rising productivity. The Social Security systems of 14 countries, for example, automatically respond to rising prices and rising wages (Horlick and Lewis, 1970). In contrast, adjustments in Social Security benefits in the United States have been largely a delayed response to price level increases. Although sporadic and irregular, raising taxable earnings levels is an attempt to adjust Social Security to rising earnings trends (Table 39.). Of course, Congress has considered proposals for automatic benefits increases geared to the Consumer Price Index and automatic adjustment of the maximum taxable earnings.

Private pension plans have become an important source of retirement in recent years as well. However, the slackening trend in the growth of coverage, as pointed out in Section IV. B.1., does not hold out a bright prospect for the future, unless basic institutional changes are made. One of the fundamental problems relates to the age and service requirements for vesting of pension rights. Many workers have not been able to collect such pensions because they have not stayed on the job long enough or are not old enough when they leave, whether voluntarily or involuntarily. Although vesting requirements have been liberalized in recent years, there still are many, many workers who do not stay in one job for 10 years or more (10 years being the common service requirement). Losing pension rights can be a very important sacrifice. Further liberalization of vesting requirements would help the situation. More basically, the question of portability of pension rights from one job to another requires urgent attention with a view to developing innovative programs.

Another problem of private pension plans has to do with the lack of survivors' and dependents' benefits. A further problem concerns adjusting private pensions upwards to keep pace with rising prices. Although some pension plans have increased the benefits to retirees, they are ad hoc decisions and are generally gratuities from the management. Moreover, this type of adjustment is by no means a widespread practice. Studies of possible ways and means to enable private pension plans to raise pensions when the general price level increases would be challenging but rewarding.

Section IV. B. 1. establishes that today's private pensioners are the economically-advantaged. If the pattern continues into the future, the distributional patterns of pension payments may bring about a greater polarization in the economic status among the aged.



V. ISSUES

In considering the problems raised in the preceding sections of this paper, it is necessary to keep in mind that cash money is not the only mechanism for meeting the needs of the elderly. Provision of certain services and facilities not only enables older people to make their money incomes go further, but may also be the only effective and efficient way that certain of their needs can be met.

Nevertheless, there is no question but that, even if services and facilities for the elderly were far more adequate than they are today, many would need much higher cash incomes than they are currently receiving.

This fact is widely recognized. Numerous proposals for action have been recommended, but before real progress can be made, a consensus is needed on several key policy issues.

Issue 1:

The long-range goal for older people is that they should have income in accordance with the "American standard of living." What should be regarded as an adequate income for older couples and older nonrelated individuals?

Probably no two people could come to complete agreement about what constitutes the American standard of living. As with other age groups, the living standards of the elderly will probably always vary in accordance with variations in their own private incomes. But is there a minimum level of living which society should feel obligated to assure all older people and, if so, how high a level is it feasible for society to underwrite? Various options merit consideration.

If mere survival is to be the goal, this would mean lifting the incomes of all elderly above the poverty line. In 1969, the poverty threshold incomes were \$2,200 for a couple and \$1,750 for a person living alone or with nonrelatives. Thus far, society has not felt obligated to assure its elderly of even this level of living as evidenced by the fact that a fourth of the elderly lived *below* these poverty levels in 1969.

Another goal might be to assure a reasonable relationship between preretirement and postretirement incomes. However, this raises the question of what is reasonable. The question has been discussed for many years in considering the relationship between earnings covered by Social Security and the retirement benefits paid from this program. Those who have studied the problem are generally agreed that the average worker should receive benefits that are equal to 40 to 50 percent of his earnings. Such a ratio, however, does not take into consideration the total incomes of retired people. For some, those who derive much of their incomes from sources other than earnings, such benefits might be more than adequate; for others, whose earnings were low, the benefits might not even assure minimum subsistence.

If total incomes are to be considered, the standard budgets compiled by the Bureau of Labor Statistics might be taken as guides. However, even this would not resolve the issue of which level of living should be supported—the lowest level, which was \$2,902 in 1969, and is adequate to maintain health only on a short time basis; the intermediate budget of \$4,192 which, at 1969 prices, could allow a couple to live on indefinitely without endangering health; or the \$6,616 budget which allows for some "psychological sustenance" as well as physical sustenance. Dollar amounts would obviously have to be translated into purchasing power if a

floor under income were established on the basis of these budgets. Further such measures would have to be continually updated and their underlying assumption carefully examined.

Related to the issue of putting an adequate income floor under the aged is the whole question of where the line should be drawn between individual initiative and social action. Freedom of choice is a cherished value in our society. Some people prefer to consume more when they are young and less when they are old; others prefer to live at a lower standard during their working years in order to enjoy an equal or higher standard when they retire. Actions which would assure a specified level of living to all elderly must be considered in relation to what effect the social costs of such action might have in limiting the freedom of choice of people in all age groups.

Issue 2.

In our system in which society has accepted responsibility for assuring older people a basic floor of income at not less than the level of poverty, how should it be provided: Through the contributory Social Security system? Some form of payment from general revenue? Or a mix of the two?

At present, the incomes of the elderly come from government sources, private pensions, and private savings; it may be assumed that most people are agreed about the desirability of this multiple system. The real question, therefore, is how this system can be expanded and improved in order to increase its flexibility, giving people greater freedom of choice while at the same time assuring that no older person will live below the minimum standard that society deems to be acceptable.

Various policy options are open. For example, government could make a greater contribution to incomes for the elderly by improving and extending Old Age Assistance and/or Social Security programs; or by instituting some form of negative income tax; or by establishing a nationally administered, nationally financed Federal assistance program, such as the Family Assistance Plan proposed by the present Administration.

Old Age Assistance is administered and partially financed by State governments and there are wide variations in financing, administrative procedures, coverage and levels of payments. States differ greatly in their attitudes about reforming these programs and in their abilities to finance such reforms. A successful revamping would be difficult because of the many governmental jurisdictions involved.

Social Security is a contributory system and the benefits retired workers receive are related to the amounts and length of time they contributed to the fund through taxes on their earnings. Although the system provides for proportionately larger benefits to those with lowest earnings, its basic purpose is to restore income losses, not to prevent poverty among older people who had no or limited participation in the labor force. If the Social Security program were used to provide an income floor under all older people, the principle of a contributory system—which has been a major reason for its widespread acceptance—would be undermined. Moreover, the working-age population would probably rebel at paying the much higher Social Security taxes which would be required. If general revenue funds were used, in lieu of increasing Social Security taxes, the program would take on important characteristics of a welfare program.

A negative income tax would allow those whose incomes fall below a specified level to receive payments from the Federal treasury which would bring their incomes up to the specified level. General revenues would finance these payments. However, if all the people whose incomes are below the poverty level were eligible for payments, the increased tax burden, especially upon middle income groups, might be so heavy that it would be neither economically nor politically feasible.

The Family Assistance Plan would also present problems of financing. If all the elderly are to be lifted out of poverty by this method, they would have to receive higher amounts that are being considered in the Congressional discussions of this plan. However, the plan would have some advantages over other approaches: it would not have the State variations that characterize the Old Age Assistance program; and it would not affect the contributory feature of the Social Security program.

Whatever method is used to assure the elderly of an income floor would have little meaning unless it included some provision for protecting the income's purchasing power. At present, Social Security benefits are adjusted by Federal legislation. Since this is an unsystematic method, consideration might well be given to providing for automatic cost-of-living increases. Methods of financing increases that might be considered include: increasing the earnings base on which Social Security taxes are paid, or investing the Social Security trust fund in Federal "constant purchasing power bonds." The ability of the Federal Government to honor such bonds would come from the larger tax base that results from inflation and, over time, from the growth of the economy.

Constant purchasing power bonds might also be used as a device for increasing the incomes of the aged enough to permit them to raise their standards of living. When increased productivity warrants, other age groups raise their living standards and, since the past contributions which the aged made to the economy helped to make this possible, they too should benefit. Another method of relating the incomes of the aged to the economic growth would be to provide for a certain percentage of the rate of economic growth to be used for raising the incomes of the elderly.

Issue 3.

In view of the growing dependence on private pensions and individual saving for retirement income above the basic floor, should Government intervene to foster increased coverage and to insure receipt of benefits by workers and their survivors? Or, should such matters be left entirely to the private sector and the individual?

At present, private pensioners are a small group of the economically advantaged. More people will receive such pensions in the future because private pension plans have grown rapidly, but further growth, under present conditions, is unlikely. The small plants and other industries that do not have such plans say they cannot afford to establish them. If private pension plans are to become an important resource for providing adequate and secure incomes for the retired, two problems must be considered: How can coverage be further expanded? How can the plans be improved?

One way to expand coverage would be to establish a master private pension plan for use by companies that cannot afford to set up their own separate plans. The National Industrial Group Pension Plan of the AFL-CIO is an example of this method. However, its benefits are limited to union members in the plants that participate in the plan. A much broader program, perhaps under governmental administration, might be considered. Another way of expanding coverage might be to make greater use of the individual policy pension trusts which are placed with insurance companies by employers for the benefit of their employees.

Many ways of improving private pension plans merit consideration. At present, workers often lose their pension rights when they leave the company before they retire. Vesting provisions might be required so that the worker would retain his pension rights wherever he worked. Some private pension plans now have vesting provisions which permit pension credits to be transferred (after a minimal number of years of employment) from one employer to another as a worker changes jobs; or the pension plans permit the worker to retain his pension rights with the original employer. Should minimum vesting standards be made compulsory for all private pension plans?

Another weakness of present plans is that they usually pay a fixed amount which does not allow for the erosion of purchasing power which results from inflation. The College Retirement Equities Fund, for example, solves this problem by permitting college teachers to invest up to 75 percent of contributions to the retirement fund in common stocks which are purchased by the fund. When he retires, the teacher receives annuity payments (which fluctuate with the value of the fund) in addition to the fixed amount of his retirement benefits. Should all private pension plans be required to include some provision to protect the purchasing power of their benefits?

One of the reasons why so many widows are impoverished is because few private pension plans include survivors' benefits. Should survivors' benefits be made compulsory?

Another problem with some private plans is that of fiduciary responsibility. Some persons argue that workers have little or no protection from the sponsor of the pension plan who does not provide proper safeguards for the funds employees contribute to the pension fund. What role, if any, should government play in ensuring that pension funds will be well managed and adequately protected?

In addition to private pension plans, the private sector of the economy contributes to retirement incomes through the amounts individuals save for their old age. There are various ways in which more people could be encouraged to save more money for retirement.

For example, income tax exemptions could be given for the amounts people have invested in public and private retirement systems. Or tax exemptions could be given on income that was put into savings accounts that had penalties for withdrawals made prior to retirement. (The Registered Retirement Savings Plan in Canada is an example of this type of savings account.) Tax revenues lost by such exemptions could be recovered when savings were drawn out as retirement income.

While these and other measures to enable people to save more would also give them an incentive to do so, a serious deterrent to saving would remain: inflation. Some device, such as linking savings with investments, would need to be developed so that the saver would be protected against erosion of the purchasing power of his savings.

Issue 4.

Recognizing the higher illness and disability rates among the elderly, their lower average income, and the rising costs of health care: (1) should payments for health services to older people continue to be a shared responsibility of Government and the individual; (2) should coverage under the present Medicare-Medicaid system be expanded to provide full payment for all health services required by older people; or (3) should the country adopt some form of national health insurance plan which would include middle-aged and older people along with the rest of the population? An important consideration is the source of the funds used for payment for services; depending upon the policy adopted, these may include payments into an insurance fund, monies derived from income and other taxes, direct payments by recipients of services?

While medical expenditures are highly variable and unpredictable as far as the individual is concerned, they are highly predictable on the basis of a group of individuals. That is why most proposals for improvements in financing health care costs take an insurance approach.

One problem with the Medicare insurance program is that it covers only the group whose risks of illness are greatest and, inevitably, this is costly. Many people find it hard to pay the \$60 deductible on hospital bills and the more than five dollars in monthly premiums on Part B of this insurance. Moreover, costly items, such as drugs and long-term care, are not

covered by Medicare. Various proposals have been made to expand the program, for example, by covering disabled people under 65, and to make it more comprehensive by covering more health care items. All such changes, of course, would increase the cost.

If Medicare continued to be financed only through Social Security taxes as at present, the working-age population might find the burden of a more adequate program intolerable. If the elderly bore the added expense, the deductibles and premiums would be so high that many could not pay them. If general revenues were drawn upon, the contributory feature of the Social Security program would be lost.

Medicaid, the other major program for financing the health care of the aged is administered and partially financed by the States. Those served and the health care costs that are covered vary greatly from State to State. Usually, only the very poor are eligible. It is most unlikely that Medicaid programs could be developed in all States that would meet all of the health needs of all of the aged which Medicare does not cover.

An approach to the problem which would not be limited to the aged is some form of national health insurance. Since the health risks of other groups are lower than those of the aged, the unit cost of such an insurance program would be lower than it would be if the same services were covered for only the aged group.

Although proposals for this type of insurance vary in terms of coverage and methods of financing, most of them include these features: persons of all ages would be covered; the government would pay the premiums for those who could not otherwise afford coverage; the Federal tax system would be used as the financing vehicle, but services would be provided, as at present, through private as well as public sources.

One advantage of this type of program is that it might encourage middle-aged people to seek treatment for the chronic conditions which lead to disabling health problems in later life. Since some of the most serious health problems associated with old age begin during middle age, this would mean improved health and reduced health care costs for the aged of the future. Another advantage is that, since all would benefit, public acceptance of such a program might be easier to obtain than would support for more costly services for the aged alone.

In terms of the welfare of the aged, however, questions can be raised as to whether a national health insurance program would be an improvement over the present Medicare and Medicaid programs. Much would depend upon the services covered and the method of financing. For example, would it provide for long-term care and other facilities and services that are needed mainly by the aged? Would other age groups—since, on a strictly cost-benefit basis, maintenance of their health is more important to the productive economy—receive higher priority than the elderly in the competition for the available health dollars? Would the elderly be required to participate in financing the program? Is it feasible to develop a full scale, effective national health insurance immediately, and if not, should efforts be made to improve the Medicare and Medicaid programs (difficult as that may be) as a means of bringing more immediate benefits to the aged?

Issue 5.

Does the relatively low income status of the older population together with the increased need for financial security warrant action by the Federal and/or State Government to help them to continue to live in their own homes through partial remission of property taxes or through some other means? Or, should older home owners share equally with younger people in matters of property taxes and other financial responsibilities of home ownership?

Since 70 percent of the elderly own their own homes, property tax concessions are frequently advocated as a method of reducing their housing costs. At present, most States do not make such concessions and in the States that do, the amount of tax relief given is

extremely limited. Is expansion of this approach feasible? In answering this question, consideration must be given to the reaction of younger taxpayers whose property taxes would have to be increased if more tax relief were given to more older people. Can the younger people afford to and will they be willing to support such a measure?

An alternative approach might be to restructure methods of financing government operations. Current proposals for revenue sharing by Federal, State, and local Governments are an example of such an approach. Methods might also be developed which would place less reliance on property taxes for financing the cost of education, welfare, and other government services. Measures to curb inflation also represent an approach to the property tax problem that would benefit all homeowners, not just the elderly.

Another way of helping elderly homeowners might be to devise some financial mechanism whereby the homeowner could increase his income by *voluntarily* converting equity in his home into current spendable monthly payments for life and at the same time be guaranteed lifetime occupancy of his home. This would give the elderly homeowner a new option in his choice of housing as well as a source of income. It would, however, deprive his heirs of the inheritance of his home.

In determining the desirability of such an arrangement, the attitudes of elderly homeowners need to be appraised. How important is it to them to be able to bequeath their homes to their heirs? Is it worth the hardships of living on inadequate incomes?

Since elderly renters as well as homeowners suffer from the burden of housing costs, broader measures also need to be considered. For example, should the Federal Government provide more assistance and, if so, in what ways?

Table 1.—Weighted Average Thresholds at the Poverty Level* in 1969, by Size of Family and Sex of Head, by Farm-Nonfarm Residence

Number of family members	Total	Nonfarm			Farm		
		Total	Male head	Female head	Total	Male head	Female head
1 member	\$1,834	\$1,840	\$1,923	\$1,792	\$1,569	\$1,607	\$1,512
Under 65 years . .	1,888	1,893	1,974	1,826	1,641	1,678	1,552
65 years and over .	1,749	1,757	1,773	1,751	1,498	1,508	1,487
2 members	2,364	2,383	2,394	2,320	2,012	2,017	1,931
Head under 65 years	2,441	2,458	2,473	2,373	2,093	2,100	1,984
Head 65 years and over	2,194	2,215	2,217	2,202	1,882	1,883	1,861
3 members	2,905	2,924	2,937	2,830	2,480	2,485	2,395
4 members	3,721	3,743	3,745	3,725	3,195	3,197	3,159
5 members	4,386	4,415	4,418	4,377	3,769	3,770	3,761
6 members	4,921	4,958	4,962	4,917	4,244	4,245	4,205
7 or more members.	6,034	6,101	6,116	5,952	5,182	5,185	5,129

Source: U.S. Bureau of the Census. 1970a. "Poverty in the United States, 1969," *Current Population Reports; Consumer Income* (Series P-60, No. 76) Washington, D.C.: U.S. Government Printing Office. p. 18.

*For derivation of the poverty index, see Appendix A.

Table 2.—Comparison of Annual Retired Couple's^a Budget for a Moderate Living Standard, by Housing Status and Place of Residence, Autumn 1966

Housing status	Total urban U.S.	Metropolitan areas ^b	Nonmetropolitan areas ^c
Total ^d	\$3,869	\$4,006	\$3,460
Renter families	3,985	4,127	3,563
Homeowner families ^e .	3,806	3,941	3,404

Source: U.S. Bureau of Labor Statistics. 1966. *Retired Couple's Budget for a Moderate Living Standard*. Bulletin No. 1570-4. Washington, D.C.: U.S. Government Printing Office.

^a For a retired husband, age 65 or over, with a wife not working regularly.

^b Cities of at least 50,000 population and the suburban ring around them. For a detailed diagram, see the 1967 edition of the Standard Metropolitan Statistical Area prepared by the Bureau of the Budget. Washington, D.C.: U.S. Government Printing Office.

^c Places with a population of 2,500 to 50,000.

^d Represents the weighted average costs of renter families (35 percent) and owner families (65 percent).

^e Owning the house outright (without mortgage payments).

Table 3.—Number of the Aged Population by Age and by Sex, 1930-1990

Sex and age	Numbers, in thousands				
	1930	1960	1970	1980	1990
Both sexes					
65+	6,644	16,560	19,799	23,492	27,567
75+	1,916	5,563	7,663	8,885	10,690
85+	--	929	1,340	1,793	2,046
65-69.....	2,776	6,258	6,920	8,299	9,446
70-74.....	1,953	4,739	5,216	6,307	7,431
75-79.....	--	3,054	3,945	4,436	5,407
80-84.....	--	1,580	2,378	2,656	3,237
85+	--	929	1,340	1,793	2,046
Males					
65+	3,333	7,503	8,393	9,634	11,113
75+	917	2,387	3,033	3,315	3,924
85+	--	362	507	618	674
65-69.....	1,422	2,931	3,140	3,671	4,119
70-74.....	994	2,185	2,219	2,647	3,070
75-79.....	--	1,359	1,593	1,745	2,093
80-84.....	--	665	933	952	1,157
85+	--	362	507	618	674
Females					
65+	3,311	9,056	11,406	13,858	16,454
75+	998	3,176	4,629	5,570	6,766
85+	--	567	833	1,175	1,372
65-69.....	1,354	3,327	3,780	4,628	5,327
70-74.....	959	2,554	2,997	3,660	4,361
75-79.....	--	1,694	2,351	2,691	3,314
80-84.....	--	915	1,445	1,704	2,080
85+	--	567	833	1,175	1,372
Females per 100 males					
65+	99.4	120.7	135.9	143.8	148.1
75+	108.8	133.1	152.6	168.0	172.4
85+	--	156.5	164.1	190.1	203.6
65-69.....	95.2	113.5	120.4	126.1	129.3
70-74.....	96.5	116.9	135.1	138.3	142.1
75-79.....	--	124.6	147.6	154.2	158.3
80-84.....	--	137.5	154.9	179.0	179.8
85+	--	156.5	164.3	190.1	203.6

Sources: For 1930-1960, Herman B. Brotman, *Useful Facts #42*. Administration on Aging Memorandum, August 9, 1968. For 1970 - 1990, U.S. Bureau of the Census, 1970b, *Projections of the Population of the United States by Age and Sex* (Interim Revisions), 1970 - 2020.

Table 4.—Median Age, "Old-Age Dependency Ratio," and the Proportion of Aged Persons in the U.S. Population, 1930-1990

Year	Median age of population			"Old age dependency ratio" 65+	65+
	Both sexes	Male	Female	20 - 64 (%)	Total population (%)
1930	26.5	26.7	26.2	9.7	5.4
1940	29.0	29.1	29.0	11.7	6.8
1950	30.2	29.9	30.5	14.0	8.1
1960	29.5	28.7	30.3	17.7	9.2
1970	27.7	26.5	29.0	18.4 ^a	9.6 ^b
1980	29.3	28.2	30.5	18.6	10.4 ^c
1990	31.6	30.4	32.7	19.3	11.1 ^c

Sources: For 1930 - 1960 calculations, taken and calculated from a number of sources of data published by the U.S. Bureau of the Census. For 1970 - 1990 calculations, *Projections of the Population of the United States by Age and Sex* (Interim Revisions), 1970 - 2020, P-25, No. 448, August 1970b. Washington, D.C.: The Bureau.

^a Since this paper was completed, published population figures for 1970 are now available, making this ratio 18.9.

^b Since this paper was completed, published population figures for 1970 are now available, making this ratio 9.9.

^c Based on Series E projections in the Census publication cited above.

Table 5.—Average Life Expectancy, Average Worklife Expectancy, and Average Retirement Years at Age 20 for Men, 1900-60

Year	Life expectancy (in years) (1)	Worklife expectancy (in years) (2)	In retirement (in years) (3)	Retirement/worklife expectancy (%)
1900	42.2	39.4	2.8	7.1
1940	46.8	41.1	5.7	13.9
1950	48.9	43.1	5.8	13.5
1960	49.6	42.6	7.0	16.4

Sources: For 1900, Stuart Garfinkle. 1956. "Changes in Working Life of Men, 1900 to 2000." In J. J. Spengler and O. D. Duncan (eds.), *Demographic Analyses, Selected Readings*. Glencoe, Ill.: The Free Press. p. 106. For 1940 and 1950, Seymour L. Wolfbein 1957. "Tables of Working Life, The Length of Working Life." Paper presented at the 4th International Gerontological Congress, Merano, Italy, July. For 1960, Stuart Garfinkle. 1963. "The Length of Working Life for Men, 1960," *Monthly Labor Review*, July, p. 822.

Table 6.—Median Income of Families by Age-of-Head,
1962 vs. 1967 in constant dollars (1957-59 base)

Age	1962	1967	$\frac{1967}{1962}$ (%)
14-24.	\$4,057	\$5,025	123.9
25-34.	5,600	6,960	124.3
35-44.	6,477	7,944	122.6
45-54.	6,679	8,320	124.6
55-64.	5,900	6,915	117.2
65+	3,040	3,377	111.1

Sources. U.S. Bureau of the Census. *Current Population Reports, Consumer Income* (Series P-60). Data for 1962 from "Income of Families and Persons in the United States: 1962," No. 41, October 21, 1963; data for 1967 from "Income in 1967 of Families in the United States," No. 59, April 18, 1969a. Washington, D.C.: U.S. Government Printing Office.

Table 7.—Percent Distribution of Aggregate Income, 1958-1967

Sources of income	1958 (I) ^a	1958 (II) ^b	1962	1967 (I) ^c	1967 (II) ^d
Earnings	38%	37%	33%	29%	30%
OASDHI	27	22	30	34	26
Other public pensions	8 }	9 }	6	7	6
Veterans benefits			4	3	3
Private pensions	6	5	3	5	5
Income from assets ^e	14	23	15	15	25
Public assistance	7	5	5	4	3
Other	(f)	(f)	4	4	2
Total	100	100	100	100	100

Sources. For 1958, Estimated from: *Background Paper on Income Maintenance*, White House Conference on Aging, 1960, p. 7 (out of print); For 1962, Lenore A. Epstein and Janet H. Murray, *The Aged Population of the United States*, 1967. Social Security Administration Research Report No. 19, Washington, D.C.: U.S. Government Printing Office; and for 1967, Lenore E. Bixby, "Income of People Aged 65 and Older: Overview from 1968 Survey," 1970. Social Security Bulletin.

^a Based on total income of \$25 billion.

^b Based on total income of \$30 billion.

^c Based on unadjusted distribution.

^d Based on adjusted distribution.

^e For 1958, including contributions from friends and relatives.

^f Less than 0.5%.

Table 8.—Trend in Median Money Income of Families and Unrelated Individuals, 1960-69^a

Period	Families			Unrelated individuals		
	Heads 14 to 64, amount	Heads 65 plus		14 to 64, amount	65 plus	
		Amount	Percent of 14 to 64		Amount	Percent of 14 to 64
1960	\$5,905	\$2,897	49.1	\$2,571	\$1,053	41.0
1961	6,099	3,026	49.6	2,589	1,106	42.7
1962	6,336	3,204	50.6	2,644	1,248	47.2
1963	6,644	3,352	50.4	2,881	1,277	44.3
1964	6,981	3,376	48.4	3,094	1,297	41.9
1965	7,413	3,514	47.4	3,344	1,378	41.2
1966	7,922	3,645	46.0	3,443	1,443	41.9
1967	8,504	3,928	46.2	3,655	1,480	40.5
1968	9,198	4,592	49.9	4,073	1,734	42.6
1969	10,085	4,803	47.6	4,314	1,855	43.0

PERCENT CHANGE

1960-69 . . .	+70.8	+65.8	+67.8	+76.2
1962-69 . . .	+59.2	+49.9	+63.2	+48.6
1960-61 . . .	+3.3	+4.4	+0.7	+5.0
1961-62 . . .	+3.9	+5.9	+2.1	+12.8
1962-63 . . .	+4.9	+4.6	+9.0	+2.3
1963-64 . . .	+5.1	+0.7	+7.4	+1.6
1964-65 . . .	+6.2	+4.1	+8.1	+6.2
1965-66 . . .	+6.9	+3.7	+3.0	+4.7
1966-67 . . .	+7.3	+7.8	+6.2	+2.6
1967-68 . . .	+8.2	+16.9	+11.4	+17.2
1968-69 . . .	+9.6	+4.6	+5.9	+7.0

Social: Prepared by the Administration on Aging, Social and Rehabilitation Service, Department of Health, Education, and Welfare from data of the U.S. Census Bureau. Taken from: U.S. Congress, Senate, Special Committee on Aging, 1970d. *Economics of Aging: Toward a Fuller Share in Abundance* (Report No. 91-1548 [91st Cong., 2nd Sess.]) Washington, D.C.: U.S. Government Printing Office. p. 203.

^a By age groups, 14 to 64 and 65 plus. Data are estimates derived from a survey of a national probability sample of households; they are subject to both sampling variability and errors in response and nonreporting.

Table 9.—Aged Families and Unrelated Individuals by Total Money Income in 1969, by Race, Sex, and Headship
[Families and unrelated individuals as of March 1970]

Total money income	Families						Unrelated individuals			
	Total	Male head					Female head	Total	Male	Female
		Total	Married, wife present			Other marital status				
			Total	Wife in paid labor force	Wife not in paid labor force					
All races										
65 years and over										
Number thousands . .	7,078	5,963	5,644	895	4,749	319	1,115	5,622	1,426	4,196
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under \$1,000	2.6	2.4	2.4	0.8	2.7	1.8	3.9	15.2	12.3	16.2
\$1,000 to \$1,499	3.6	3.2	3.2	0.4	3.7	3.8	5.5	22.6	18.9	23.8
\$1,500 to \$1,999	6.0	5.8	5.8	2.3	6.5	5.4	7.3	17.2	15.0	18.0
\$2,000 to \$2,499	7.9	8.0	8.1	2.9	9.1	5.8	7.6	11.7	10.2	12.2
\$2,500 to \$2,999	7.3	7.5	7.6	4.0	8.3	5.2	6.6	7.4	11.8	5.9
\$3,000 to \$3,499	7.0	7.1	7.2	4.6	7.7	6.1	6.5	4.6	5.4	4.3
\$3,500 to \$3,999	7.0	7.4	7.6	4.9	8.1	3.9	4.7	4.3	5.6	3.9
\$4,000 to \$4,999	10.6	11.1	11.3	8.5	11.8	8.4	8.0	4.6	4.7	4.5
\$5,000 to \$5,999	8.3	8.8	8.8	10.9	8.4	8.6	5.7	3.3	3.4	3.2
\$6,000 to \$6,999	6.6	6.4	6.4	7.9	6.1	6.4	7.6	2.3	2.5	2.3
\$7,000 to \$7,999	6.0	5.7	5.6	7.7	5.2	8.3	7.1	1.8	2.8	1.4
\$8,000 to \$8,999	4.7	4.6	4.7	7.1	4.2	3.7	4.8	1.2	1.7	1.0
\$9,000 to \$9,999	4.0	3.8	3.6	6.7	3.0	6.8	5.1	0.8	1.5	0.6
\$10,000 to \$11,999	5.7	5.5	5.4	9.8	4.6	7.4	6.4	0.8	1.1	0.7
\$12,000 to \$14,999	4.9	4.6	4.5	8.7	3.7	5.5	6.9	0.8	1.4	0.6
\$15,000 to \$24,999	5.6	5.7	5.4	9.9	4.6	10.4	5.5	1.0	1.2	0.9
\$25,000 to \$49,999	1.8	2.0	2.0	2.2	1.9	2.6	0.9	0.4	0.6	0.3
\$50,000 and over	0.3	0.4	0.4	0.5	0.4	--	--	0.1	--	0.1
Median income . . Dollars .	4,803	4,779	4,721	7,353	4,339	6,174	4,986	1,855	2,191	1,777
Mean income . . . Dollars .	6,722	6,768	6,710	9,109	6,258	7,791	6,478	2,884	3,283	2,749
White										
65 years and over										
Number thousands . .	6,515	5,564	5,272	795	4,476	292	951	5,115	1,234	3,881
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under \$1,000	2.3	2.2	2.2	0.8	2.5	1.5	2.7	13.6	9.8	14.8
\$1,000 to \$1,499	3.1	2.9	2.9	0.3	3.3	3.6	4.1	21.9	17.6	23.2
\$1,500 to \$1,999	5.5	5.4	5.4	1.5	6.1	5.1	6.3	17.2	15.6	17.7
\$2,000 to \$2,499	7.6	7.8	7.9	2.7	8.9	5.4	6.4	12.3	10.4	12.8
\$2,500 to \$2,999	7.2	7.4	7.5	3.1	8.2	5.5	6.6	7.4	11.6	6.1
\$3,000 to \$3,499	7.0	7.0	7.0	4.1	7.6	6.2	6.8	4.9	6.0	4.5
\$3,500 to \$3,999	7.1	7.5	7.7	4.6	8.3	3.3	4.8	4.5	5.8	4.1
\$4,000 to \$4,999	10.8	11.2	11.3	8.1	11.9	8.9	8.2	4.9	5.2	4.8
\$5,000 to \$5,999	8.5	8.9	9.0	10.1	8.8	8.1	5.8	3.5	3.8	3.3
\$6,000 to \$6,999	6.8	6.6	6.6	8.4	6.2	7.0	8.0	2.5	2.9	2.4
\$7,000 to \$7,999	6.0	5.7	5.7	7.8	5.3	7.4	7.7	1.8	2.8	1.5
\$8,000 to \$8,999	4.7	4.6	4.7	7.6	4.2	3.6	4.9	1.3	1.9	1.1
\$9,000 to \$9,999	4.1	3.8	3.6	7.0	3.0	7.4	5.9	0.9	1.7	0.6
\$10,000 to \$11,999	5.9	5.6	5.6	10.5	4.7	7.4	7.3	0.8	1.1	0.7
\$12,000 to \$14,999	5.3	4.8	4.8	9.7	3.9	6.0	7.7	0.9	1.6	0.7
\$15,000 to \$24,999	5.9	5.9	5.6	10.6	4.8	10.8	5.8	1.1	1.4	1.0
\$25,000 to \$49,999	2.0	2.1	2.1	2.5	2.0	2.8	0.9	0.4	0.6	0.4
\$50,000 and over	0.3	0.4	0.4	0.6	0.4	--	--	0.1	--	0.1
Median income . . Dollars .	4,952	4,884	4,827	7,802	4,438	6,352	5,699	1,922	2,336	1,838
Mean income . . . Dollars .	6,927	6,933	6,874	9,566	6,395	7,992	6,896	3,007	3,490	2,854

Table 9. (Cont'd.)—Aged Families and Unrelated Individuals by Total Money Income in 1969, by Race, Sex, and Headship

[Families and unrelated individuals as of March 1970—Continued]

Total money income	Families						Unrelated individuals			
	Total	Male head					Female head	Total	Male	Female
		Total	Married, wife present			Other marital status				
			Total	Wife in paid labor force	Wife not in paid labor force					
Negro										
65 years and over										
Number thousands . .	507	352	326	84	242	26	155	449	153	296
Percent	100.0	100.0	100.0	100.0	100.0	(B)	100.0	100.0	100.0	100.0
Under \$1,000	6.3	5.2	5.2	1.1	6.7	(B)	8.7	32.6	30.1	33.9
\$1,000 to \$1,499	10.1	8.4	8.5	1.5	10.9	(B)	14.1	30.8	31.1	30.6
\$1,500 to \$1,999	11.6	11.5	11.8	8.2	13.0	(B)	11.7	17.9	10.4	21.8
\$2,000 to \$2,499	12.7	11.6	11.7	5.6	13.8	(B)	15.3	5.5	6.6	4.9
\$2,500 to \$2,999	8.5	9.0	9.7	9.9	9.6	(B)	7.5	4.5	7.0	3.3
\$3,000 to \$3,499	8.3	9.7	10.1	9.6	10.3	(B)	5.0	1.5	1.8	1.4
\$3,500 to \$3,999	5.2	5.7	5.3	7.7	4.5	(B)	4.0	2.1	4.7	0.7
\$4,000 to \$4,999	8.9	9.6	10.1	10.8	9.9	(B)	7.4	1.5	1.6	1.5
\$5,000 to \$5,999	7.1	7.8	7.3	19.6	3.0	(B)	5.5	1.5	1.3	1.7
\$6,000 to \$6,999	4.7	4.5	4.9	4.8	4.9	(B)	5.1	--	--	--
\$7,000 to \$7,999	4.6	4.7	3.6	5.0	3.1	(B)	4.4	1.3	3.1	0.3
\$8,000 to \$8,999	3.6	3.3	3.2	--	4.3	(B)	4.3	0.3	0.8	--
\$9,000 to \$9,999	2.2	3.1	3.4	4.7	2.9	(B)	--	--	--	--
\$10,000 to \$11,999	2.6	3.3	3.0	5.5	2.1	(B)	1.1	0.5	1.5	--
\$12,000 to \$14,999	0.6	0.4	0.4	1.5	--	(B)	1.3	--	--	--
\$15,000 to \$24,999	2.5	1.9	1.6	4.5	0.6	(B)	3.7	--	--	--
\$25,000 to \$49,999	0.4	0.3	0.3	--	0.5	(B)	0.7	--	--	--
\$50,000 and over	--	--	--	--	--	(B)	--	--	--	--
Median income . dollars . .	3,045	3,222	3,154	4,596	2,792	(B)	2,511	1,283	1,321	1,263
Mean income . . dollars . .	4,205	4,257	4,149	5,386	3,721	(B)	4,085	1,609	1,954	1,432

Source: U.S. Bureau of the Census. 1970c. "Income in 1969 of Families and Persons in the United States," *Current Population Report, Consumer Income* (Series P-60, No. 75) Washington, D.C.: U.S. Government Printing Office, Table 17.

Table 10.—Tax-Free Income Levels for Individuals Age 65 or Over,
1969-1973^a

Year	Single returns	Joint returns	
	Taxpayer, age 65 or over	One taxpayer, age 65 or over	Both taxpayers, age 65 or over
1969 ^b	\$1,600	\$2,300	\$3,000
1970 ^c	2,350	2,975	3,600
1971 ^d	2,350	3,000	3,650
1972 ^e	2,400	3,100	3,800
1973 ^f (and thereafter)	2,500	3,250	4,000

Source: Office of Tax Analysis, U.S. Treasury Department, 1970. (Unpublished).

^a Income levels exclusive of Social Security benefits and other income not subject to tax.

^b Tax-free income levels equal \$600 per exemption (including the exemption for age) plus a minimum standard deduction of \$200 plus \$100 per exemption (including the exemption for age).

^c Tax-free income levels equal \$625 per exemption (including the exemption for age) plus a low income allowance of \$1,100.

^d Tax-free income levels equal \$650 per exemption (including the exemption for age) plus a low income allowance of \$1,050.

^e Tax-free income levels equal \$700 per exemption (including the exemption for age) plus a low income allowance of \$1,000.

^f Tax-free income levels equal \$750 per exemption (including the exemption for age) plus a low income allowance of \$1,000.

Table 11.—Changes in Number and Percent of All Families below the Poverty Level by Age and Race of Head

Age of head	1959		1964		1968		1969		Change in Percent Poor				
	No. in thous.	%	No. in thous.	%	No. in thous.	%	No. in thous.	%	1959-64	1964-68	1959-68	1959-69	1968-69
ALL RACES													
Total . .	8,320	18.5	7,160	15.0	5,047	10.0	4,950	9.7	-3.5	-5.0	-8.5	-8.8	-0.3
Under 25 .	622	26.9	591	20.1	437	13.2	528	15.0	-6.8	-6.9	-13.7	-11.9	+1.8
25-34. . . .	1,617	17.6	1,447	15.6	1,004	9.8	949	8.9	-2.0	-5.8	-7.8	-8.7	-0.9
35-44. . . .	1,697	15.5	1,473	13.2	980	8.9	870	8.0	-2.3	-4.3	-6.6	-7.5	-0.9
45-54. . . .	1,438	15.0	1,101	10.7	747	7.0	703	6.5	-4.3	-3.7	-8.0	-8.5	-0.5
55-64. . . .	1,086	15.9	992	13.2	678	8.2	658	7.9	-2.7	-5.0	-7.7	-8.0	-0.3
65+	1,860	30.0	1,556	23.1	1,201	17.0	1,243	17.6	-6.9	-6.1	-13.0	-12.4	+0.6
WHITE													
Total . .	6,185	15.2	5,258	12.2	3,616	8.0	3,550	7.7	-3.0	-4.2	-7.2	-7.5	-0.3
Under 25 .	460	22.5	435	16.6	318	10.9	373	12.2	-5.9	-5.7	-11.6	-10.3	+1.3
25-34. . . .	1,106	13.5	968	11.8	656	7.2	628	6.7	-1.7	-4.6	-6.3	-6.8	-0.5
35-44. . . .	1,213	12.3	1,012	10.1	647	6.6	591	6.1	-2.2	-3.5	-5.7	-6.2	-0.5
45-54. . . .	1,026	11.8	784	8.5	517	5.4	483	4.9	-3.3	-3.1	-6.4	-6.9	-0.5
55-64. . . .	840	13.4	771	11.3	496	6.6	465	6.2	-2.1	-4.7	-6.8	-7.2	-0.4
65+	1,540	26.8	1,288	20.8	982	15.1	1,014	15.6	-6.0	-5.7	-11.7	-11.2	+0.5
NEGRO AND OTHER RACES													
Total . .	2,135	50.4	1,902	40.0	1,431	28.2	1,395	26.7	-10.4	-11.8	-22.2	-23.7	-1.5
Under 25 .	162	61.3	156	48.5	119	31.0	155	33.0	-12.8	-17.5	-30.3	-28.3	+2.0
25-34. . . .	511	52.9	479	45.3	348	29.9	320	26.1	-7.6	-15.4	-23.0	-26.8	-3.8
35-44. . . .	484	44.6	461	39.0	333	28.7	279	24.6	-5.6	-10.3	-15.9	-20.0	-4.1
45-54. . . .	412	45.3	317	31.5	230	22.1	219	21.4	-13.8	-9.4	-23.2	-23.9	-0.7
55-64. . . .	246	44.0	221	34.3	182	23.9	193	24.2	-9.7	-10.4	-20.1	-19.8	+0.3
65+	320	70.9	268	49.6	219	39.0	228	40.6	-21.3	-10.6	-31.9	-30.3	+1.6

Sources: U.S. Bureau of the Census. *Current Population Reports, Consumer Income*. "Poverty in the United States 1959 to 1966." (Series P-60, No. 68) Dec. 31, 1969b. p. 33, 35. "24 Million Americans - Poverty in the United States 1969." (Series P-60, No. 76) Dec. 16, 1970a. p. 52. Washington, D.C.: U.S. Government Printing Office.

Table 12.—Changes in Number and Percent of All Families with Male Head below the Poverty Level by Age and Race of Head

Age of head	1959		1964		1968		1969		Change in Percent Poor				
	No. in thous.	%	No. in thous.	%	No. in thous.	%	No. in thous.	%	1959-64	1964-68	1959-68	1959-69	1968-69
ALL RACES													
Total . .	6,404	15.8	5,338	12.5	3,292	7.3	3,146	6.9	-3.3	-5.2	-8.5	-8.9	-0.4
Under 25 .	473	22.0	439	16.2	268	8.9	264	8.6	-5.8	-7.3	-13.1	-13.4	-0.3
25-34. . . .	1,185	13.9	1,006	11.8	516	5.5	474	4.9	-2.1	-6.3	-8.4	-9.0	-0.6
35-44. . . .	1,221	12.2	996	9.9	549	5.6	490	5.0	-2.3	-4.3	-6.6	-7.2	-0.6
45-54. . . .	1,076	12.5	810	8.7	475	5.0	454	4.7	-3.8	-3.7	-7.5	-7.8	-0.3
55-64. . . .	913	15.0	825	12.3	537	7.2	485	6.6	-2.7	-5.1	-7.8	-8.4	-0.6
65+	1,536	29.7	1,262	22.4	947	15.9	980	16.4	-7.3	-6.5	-13.8	-13.3	+0.5
WHITE													
Total . .	4,952	13.3	4,133	10.5	2,595	6.3	2,490	6.0	-2.8	-4.2	-7.0	-7.3	-0.3
Under 25 .	381	19.6	354	14.3	219	8.0	217	7.8	-5.3	-6.3	-11.6	-11.8	-0.2
25-34. . . .	351	10.9	717	9.3	395	4.6	355	4.0	-1.6	-4.7	-6.3	-6.9	-0.6
35-44. . . .	879	9.6	722	7.9	423	4.7	379	4.2	-1.7	-3.2	-4.9	-5.4	-0.5
45-54. . . .	797	10.1	596	7.1	360	4.1	339	3.8	-3.0	-3.0	-6.0	-6.3	-0.3
55-64. . . .	741	13.1	662	10.8	409	6.0	365	5.4	-2.3	-4.8	-7.1	-7.7	-0.6
65+	1,303	26.9	1,082	20.7	789	14.3	836	15.0	-6.2	-6.4	-12.6	-11.9	+0.7
NEGRO AND OTHER RACES													
Total . .	1,452	44.2	1,205	33.2	697	18.9	656	17.2	-11.0	-14.3	-25.3	-27.0	-1.7
Under 25 .	92	(*)	85	36.0	49	18.3	47	15.0	--	-17.7	--	--	-3.3
25-34. . . .	334	45.2	289	36.5	121	14.8	119	13.2	-8.7	-21.7	-30.4	-32.0	-1.6
35-44. . . .	342	38.9	274	31.6	126	15.8	111	13.8	-7.3	-15.8	-23.1	-25.1	-2.0
45-54. . . .	279	40.4	214	26.6	115	14.4	115	14.8	-13.8	-12.2	-26.0	-25.6	+0.4
55-64. . . .	172	38.1	163	31.0	128	21.2	120	19.1	-7.1	-9.8	-16.9	-19.0	-2.1
65+	233	70.7	180	44.8	158	39.0	144	36.1	-25.9	-5.8	-31.7	-34.6	-2.9

Sources: U.S. Bureau of the Census. *Current Population Reports, Consumer Income*. "Poverty in the United States, 1959-1966." (Series P-60, No. 68) Dec. 31, 1969b. p. 33, 35. "24 Million Americans - Poverty in the United States: 1969." (Series P-60, No. 76) Dec. 16, 1970a. p. 52. Washington, D.C.: U.S. Government Printing Office.

* 1968 base less than 75,000: 1959 & 1964 base less than 200,000.

Table 13.—Changes in Number and Percent of All Families with Female Head below the Poverty Level by Age and Race of Head

Age of head	1959		1964		1968		1969		Change in Percent Poor				
	No. in thous.	%	No. in thous.	%	No. in thous.	%	No. in thous.	%	1959-64	1964-68	1959-68	1959-69	1968-69
ALL RACES													
Total . .	1,916	42.6	1,882	36.4	1,755	32.3	1,804	32.3	-6.2	-4.1	-10.3	-10.3	-0.0
Under 25 .	149	(*)	152	66.6	169	52.9	263	60.2	--	-13.7	--	--	+7.3
25-34. . . .	432	68.5	441	60.5	488	52.7	475	51.6	-8.0	-7.8	-15.8	-16.9	-1.1
35-44. . . .	476	50.7	477	41.7	431	37.1	379	35.3	-9.0	-4.6	-13.6	-15.4	-1.8
45-54. . . .	362	36.3	291	29.1	272	24.8	249	22.3	-7.2	-4.3	-11.5	-14.0	-2.5
55-64. . . .	173	23.6	167	20.5	141	17.6	174	18.9	-3.1	-2.9	-6.0	-4.7	+1.3
65+	324	31.5	294	27.0	254	22.3	263	23.6	-4.5	-4.7	-9.2	-7.9	+1.3
WHITE													
Total . .	1,233	34.8	1,125	29.0	1,021	25.2	1,065	25.4	-5.8	-3.8	-9.6	-9.4	+0.2
Under 25 .	79	(*)	81	(*)	99	49.2	156	55.1	--	--	--	--	+5.9
25-34. . . .	255	63.1	251	54.0	261	45.0	273	46.4	-9.1	-9.0	-18.1	-16.7	+1.4
35-44. . . .	334	45.7	290	35.0	224	28.2	212	28.3	-10.7	-6.8	-17.5	-17.4	+0.1
45-54. . . .	229	29.4	188	23.0	157	18.5	145	16.6	-5.9	-5.0	-10.9	-12.8	-1.9
55-64. . . .	99	15.9	109	15.7	87	13.5	100	13.4	-0.2	-2.2	-2.4	-2.5	-0.1
65+	237	26.2	206	21.7	193	19.6	179	18.8	-4.5	-2.1	-6.6	-7.4	-0.8
NEGRO AND OTHER RACES													
Total . .	683	72.0	697	61.9	734	52.9	739	53.0	-10.1	-9.0	-19.1	-19.0	+0.1
Under 25 .	70	(*)	71	(*)	70	59.2	108	69.6	--	--	--	--	+10.4
25-34. . . .	177	78.3	190	71.8	227	65.8	202	60.8	-6.5	-6.0	-12.5	-17.5	-5.0
35-44. . . .	142	68.6	187	59.3	207	56.2	167	51.4	-9.3	-3.1	-12.4	-17.2	-4.8
45-54. . . .	133	60.5	103	51.0	115	47.1	104	42.4	-9.5	-3.9	-13.4	-18.1	-4.7
55-64. . . .	74	(*)	58	(*)	54	34.9	74	42.7	--	--	--	--	+7.8
65+	87	(*)	88	(*)	61	39.1	84	51.3	--	--	--	--	+12.2

Sources: U.S. Bureau of the Census. *Current Population Reports, Consumer Income*. "Poverty in the United States 1959 to 1966." (Series P-60, No. 68) Dec. 31, 1969b, p. 34, 36. "24 Million Americans - Poverty in the United States: 1969." (Series P-60, No. 76) Dec. 16, 1970a, p. 52. Washington, D.C. U.S. Government Printing Office.

* 1968, 1969 base less than 75,000; 1959 & 1964 base less than 200,000.

Table 14.—Changes in Number and Percent of All Unrelated Individuals below Poverty Level by Age and Race of Head

Age of head	1959		1964		1968		1969		Changes in Percent Poor				
	No. in thous.	%	No. in thous.	%	No. in thous.	%	No. in thous.	%	1959-64	1964-68	1959-68	1959-69	1968-69
ALL RACES													
Total . .	4,928	46.1	5,143	42.7	4,694	34.0	4,851	33.6	-3.4	-8.7	-12.1	-12.5	-0.4
Under 25 .	506	51.7	454	37.7	608	36.5	667	38.5	-14.0	-1.2	-15.2	-13.2	+2.0
25-34. . . .	210	20.2	196	18.9	161	11.1	198	12.9	-1.3	-7.8	-9.1	-7.3	+1.8
35-44. . . .	315	30.4	261	22.4	203	18.8	187	17.1	-8.0	-3.6	-11.6	-13.3	-1.7
45-54. . . .	557	32.0	514	33.2	379	21.5	377	21.7	+1.2	-11.7	-10.5	-10.3	+0.2
55-64. . . .	944	41.5	924	37.1	759	29.7	761	27.9	-4.4	-7.4	-11.8	-13.6	-1.8
65+	2,396	66.0	2,794	60.6	2,584	48.8	2,660	47.3	-5.4	-11.8	-17.2	-18.7	-1.5
WHITE													
Total . .	4,041	44.1	4,241	40.7	3,849	32.2	3,962	31.8	-3.4	-8.5	-11.9	-12.3	-0.4
Under 25 .	402	48.5	383	36.0	532	35.8	571	37.6	-12.5	-0.2	-12.7	-10.9	+1.8
25-34. . . .	144	17.7	146	17.8	125	10.4	147	11.5	+0.1	-7.4	-7.3	-6.2	+1.1
35-44. . . .	232	28.6	159	17.6	112	13.9	108	13.7	-11.0	-3.7	-14.7	-14.9	-0.2
45-54. . . .	339	24.4	364	29.2	245	17.2	243	17.5	+4.8	-12.0	-7.2	-6.9	-0.3
55-64. . . .	749	38.1	737	33.6	585	26.4	594	24.8	-4.5	-7.2	-11.7	-13.3	-1.6
65+	2,175	65.0	2,452	58.6	2,250	46.7	2,300	45.0	-6.4	-11.9	-18.3	-20.0	1.7
NEGRO AND OTHER RACES													
Total . .	887	57.4	902	55.0	845	45.7	889	44.9	-2.4	-9.3	-11.7	-12.5	-0.8
Under 25 .	104	(*)	70	(*)	76	43.1	97	44.5	--	--	--	--	+1.4
25-34. . . .	66	29.5	51	23.1	36	14.4	51	19.5	-6.4	-8.7	-15.1	-10.0	+5.1
35-44. . . .	33	37.3	102	39.2	91	33.3	79	25.8	+1.9	-5.9	-4.0	-11.5	-7.5
45-54. . . .	218	61.4	150	49.5	134	40.0	135	37.8	-11.9	-9.5	-21.4	-23.6	-2.2
55-64. . . .	195	63.4	187	63.5	174	51.5	167	50.5	+0.1	-12.0	-11.9	-12.9	-1.0
65+	221	76.6	342	80.2	334	70.2	361	71.1	+3.6	-10.0	-6.4	-5.5	+0.9

Sources: U.S. Bureau of the Census. *Current Population Reports, Consumer Income*. "Poverty in the United States 1959 to 1966." (Series P-60, No. 68) Dec. 31, 1969b. p. 34, 37. "24 Million Americans - Poverty in the United States, 1969." (Series P-60, No. 76) Dec. 16, 1970a. p. 53. Washington, D.C.: U.S. Government Printing Office.

* 1968, 1969 base less than 75,000; 1959, 1964 base less than 200,000.

Table 15.—Changes in Number and Percent of All Male Unrelated Individuals below the Poverty Level by Age and Race of Head

Age of head	1959		1964		1968		1969		Changes in percent poor				
	No. in thous.	%	No. in thous.	%	No. in thous.	%	No. in thous.	%	1959-64	1964-68	1959-68	1959-69	1968-69
ALL RACES													
Total . .	1,552	36.8	1,469	32.0	1,320	25.4	1,379	25.3	-4.8	-6.6	-11.4	-11.5	-0.1
Under 25 .	147	39.5	148	29.3	254	32.1	267	32.5	-10.2	+2.8	-7.4	-7.0	+0.4
5-34 . . .	109	17.2	104	16.2	87	9.5	107	11.3	-1.0	-6.7	-7.7	-5.9	+1.8
5-44 . . .	110	19.2	117	17.1	86	13.3	80	12.1	-2.1	-3.8	-5.9	-7.1	-1.2
5-54 . . .	232	31.1	184	28.7	125	15.6	138	17.7	-2.4	-13.1	-15.5	-13.4	+2.1
5-64 . . .	327	40.1	279	33.1	193	26.6	219	27.3	-7.0	-6.5	-13.5	-12.8	+0.7
5+	627	58.5	637	49.6	575	43.5	567	39.8	-8.9	-6.1	-15.0	-18.7	-3.7
WHITE													
Total . .	1,158	33.9	1,106	29.4	1,000	23.3	1,047	23.4	-4.5	-6.1	-10.6	-10.5	+0.1
Under 25 .	99	32.4	117	27.7	224	32.2	223	31.6	-4.7	+4.5	-0.2	-0.8	-0.6
5-34 . . .	75	15.1	76	15.1	64	8.5	73	9.3	-0.0	-6.6	-6.6	-5.8	+0.8
5-44 . . .	77	16.9	63	12.0	37	7.9	49	10.4	-4.9	-4.1	-9.0	-6.5	+2.5
5-54 . . .	137	24.1	137	26.7	70	11.3	82	13.7	+2.6	-15.4	-12.8	-10.4	+2.4
5-64 . . .	234	36.3	200	29.1	134	22.3	173	25.4	-7.2	-6.8	-14.0	-10.9	+3.1
5+	536	56.8	513	46.1	471	41.1	448	36.3	-10.7	-5.0	-15.7	-20.5	-4.8
NEGRO AND OTHER RACES													
Total . .	394	49.6	363	43.4	320	34.8	332	34.3	-6.2	-8.6	-14.8	-15.3	-0.5
Under 25 .	48	(*)	30	(*)	30	31.8	45	38.0	--	--	--	--	+6.2
5-34 . . .	34	(*)	29	(*)	23	13.9	34	21.5	--	--	--	--	+7.6
5-44 . . .	33	(*)	54	(*)	49	26.5	32	16.2	--	--	--	--	-10.3
5-54 . . .	95	(*)	47	(*)	55	31.0	56	30.9	--	--	--	--	-0.1
5-64 . . .	93	(*)	79	(*)	59	46.7	46	37.3	--	--	--	--	-9.4
5+	91	(*)	124	(*)	104	59.7	119	62.1	--	--	--	--	+2.4

Sources: U.S. Bureau of the Census. *Current Population Reports, Consumer Income*. "Poverty in the United States 1959 to 1966." (Series P-60, No. 68) Dec. 31, 1969b. p. 35, 38. "24 Million Americans - Poverty in the United States 1969." (Series P-60, No. 76) Dec. 16, 1970a. p. 53. Washington, D.C.: U.S. Government Printing Office.

* 1968, 1969 base less than 75,000; 1959, 1964 base less than 200,000.

Table 16.—Change in Number and Percent of Female Unrelated Individuals below the Poverty Level by Age and Race of Head

Age of head	1959		1964		1968		1969		Changes in percent poor				
	No. in thous.	%	No. in thous.	%	No. in thous.	%	No. in thous.	%	1959-64	1964-68	1959-68	1959-69	1968-69
ALL RACES													
Total . . .	3,376	52.1	3,674	49.3	3,374	39.2	3,472	38.5	-2.8	-10.1	-12.9	-13.6	-0.7
Under 25 . . .	359	59.1	306	43.8	354	40.6	400	43.9	-15.3	-3.2	-18.5	-15.2	+3.3
25-34 . . .	101	25.0	92	23.5	74	13.8	91	15.4	-1.5	-9.7	-11.2	-9.6	+1.6
35-44 . . .	205	44.3	144	29.8	117	27.2	107	24.9	-14.5	-2.6	-17.1	-19.4	-2.3
45-54 . . .	325	32.6	330	36.3	254	26.5	239	24.9	+3.7	-9.8	-6.1	-7.7	-1.6
55-64 . . .	617	42.4	645	39.2	566	30.9	541	28.2	-3.2	-8.3	-11.5	-14.2	-2.7
65+ . . .	1,769	69.1	2,157	64.8	2,009	50.6	2,093	49.9	-4.3	-14.2	-13.5	-19.2	-0.7
WHITE													
Total . . .	2,883	50.3	3,135	47.1	2,849	37.1	2,914	36.4	-3.2	-10.0	-13.2	-13.9	-0.7
Under 25 . . .	303	57.7	266	41.5	308	39.0	348	42.8	-16.2	-2.5	-18.7	-14.9	+3.8
25-34 . . .	69	22.0	70	22.0	61	13.5	75	15.2	-0.0	-8.5	-8.5	-6.8	+1.7
35-44 . . .	155	43.6	96	25.1	75	21.9	59	18.6	-18.5	-3.2	-21.7	-25.0	-3.3
45-54 . . .	202	24.7	227	30.9	175	21.8	160	20.4	+6.2	-9.1	-2.9	-4.3	-1.4
55-64 . . .	515	39.0	537	35.7	451	27.9	421	24.6	-3.3	-7.8	-11.1	-14.4	-3.3
65+ . . .	1,639	68.3	1,939	63.1	1,779	48.5	1,852	47.7	-5.2	-14.6	-19.8	-20.6	-0.8
NEGRO AND OTHER RACES													
Total . . .	493	65.6	539	67.0	525	56.7	557	55.1	+1.4	-10.3	-8.9	-10.5	-1.6
Under 25 . . .	56	(*)	40	(*)	46	57.5	52	52.2	--	--	--	--	-5.3
25-34 . . .	32	(*)	22	(*)	13	15.3	16	16.2	--	--	--	--	+0.9
35-44 . . .	50	(*)	48	(*)	42	47.6	48	42.5	--	--	--	--	-5.1
45-54 . . .	123	(*)	103	(*)	79	50.1	79	44.8	--	--	--	--	-5.3
55-64 . . .	102	(*)	108	(*)	115	54.4	121	58.3	--	--	--	--	+3.9
65+ . . .	130	(*)	218	84.8	230	76.5	241	76.6	--	-8.3	--	--	+0.1

Sources: U.S. Bureau of the Census, *Current Population Reports, Consumer Income*. "Poverty in the United States 1959 to 1966" (Series P-60, No. 68) Dec. 31, 1969b, p. 35, 38. "24 Million Americans—Poverty in the United States, 1969." (Series P-60, No. 76) Dec. 16, 1970a, p. 53. Washington, D.C.: U.S. Government Printing Office.

* 1968, 1969 base less than 75,000; 1959, 1964 base less than 200,000.

Table 17a.—Number and Percent of Retired Couples with Current Money Incomes in 1967 below, within, and above the Three Budgets ("Lower," "Intermediate," "Higher") in 1967^a

Income level	Families with male head 65 or over and wife not working	
	<i>Number (000's)</i>	<i>Percent</i>
Below lower budget (\$2,670 or less)	1,660	35
Between lower and intermediate budgets (\$2,671 - \$3,857)	958	20
Between intermediate and higher budgets (\$3,857 - \$6,039)	864	18
Above higher budget (\$6,040 or more)	1,257	27
Total families	4,745	100

Source: U.S. Bureau of Labor Statistics. 1970. "3 Budgets for a Retired Couple in Urban Areas in the United States 1967-68." *Bulletin* 1570-6. Washington, D.C.: U.S. Government Printing Office.

^a Income data are for all U.S. (urban and rural) families; budget costs are for urban families only.

Table 17b.—Number and Percent of Retired Couples with Current Money Incomes in 1969 below, within, and above the Three Budgets ("Lower," "Intermediate," "Higher") in 1969^a

Income level	Families with male head 65 or over and wife not in paid labor force, March 1970	
	<i>Number (000's)</i>	<i>Percent</i>
Below lower budget (\$2,902 or less)	1,425	30
Between lower & intermediate budgets (\$2,903 - 4,192)	855	18
Between intermediate and higher budgets (\$4,193 - 6,616)	1,045	22
Above higher budget (\$6,617 or more)	1,425	30
Total families	4,750	100

Source: U.S. Bureau of the Census. 1970c. "Income in 1969 of Families and Persons in the United States," *Current Population Reports, Consumer Income* (Series P-60, No. 75) Washington, D.C.: U.S. Government Printing Office. Table 17, p. 37.

^a Income data are for all U.S. (urban and rural) families; budget costs are for urban families only.

Table 17c.—Number and Percent of City Workers' Families with Current Money Income in 1967 below, within, and above the Three Budgets ("Lower," "Intermediate," "Higher") in 1967^a

Income level	Families with male head, age 35-44, married, wife present and not in paid labor force, March 1968	
	<i>Number (000's)</i>	<i>Percent</i>
Below lower budget (\$5,914 or less)	1,076	18
Between lower and intermediate budgets (\$5,915 - 9,076)	1,792	30
Between intermediate and higher budgets (\$9,076 - 13,050)	1,732	29
Above higher budget (\$13,051 or more)	1,374	23
Total families	5,974	100

Source: Courtesy of Helen H. Lamale. 1971b. Letter to the Author, February 4. Dr. Yung-Ping Chen, Associate Professor of Economics, University of California at Los Angeles.

^a Income data are for all U.S. (urban and rural) families; budget costs are for urban families only.

Table 17d.—Number and Percent of City Workers' Families with Current Money Income in 1969 below, within, and above the Three Budgets ("Lower," "Intermediate," "Higher") in 1969^a

Income level	Families with male head, age 35-44, married, wife present and not in paid labor force, March 1970	
	<i>Number (000's)</i>	<i>Percent</i>
Below lower budget (\$6,543 or less)	887	16
Between lower and intermediate budgets (\$6,544-10,064)	1,552	28
Between intermediate and higher budgets (\$10,064 - 14,571)	1,662	30
Above higher budget (\$14,572 or more)	1,441	26
Total families	5,542	100

Source: Courtesy of Helen H. Lamale. 1971. Letter to the author, January 26. Dr. Yung-Ping Chen, Associate Professor of Economics, University of California at Los Angeles.

^a Income data are for all U.S. (urban and rural) families; budget costs are for urban families only.

Table 18.—Net Worth by Age Groups, 1962

Age of head of spending unit or family	Median net worth	
	Survey of consumer finances	Survey of financial characteristics
Under 25	\$ 250	\$ 270
25-34	1,800	2,080
35-44	6,000	8,000
45-54	9,000	11,950
55-64	9,960	14,950
65 and over	8,000	10,450
All groups	4,700	7,550

Sources: Survey, Research Center, University of Michigan, 1963. *1962 Survey of Consumer Finances*. Ann Arbor, Michigan: University of Michigan, pp. 128-29. U.S. Board of Governors of the Federal Reserve System. "Survey of Financial Characteristics of Consumers," *Federal Reserve Bulletin*, March 1964, p. 291.

Table 19.—Median Income for Units Aged 65 and Over in 1962: Actual vs. Potential Incomes

Unit	Actual income	Potential income			
		Amount	% Improvement over actual in- come when home equity excluded	Amount	% Improvement over actual in- come when home equity included
Married couples	\$2,875	\$3,130	9	\$3,795	32
Nonmarried men	1,365	1,500	14	1,845	35
Nonmarried women	1,015	1,130	10	1,395	37

Source: Based on Lenore A. Epstein and Janet H. Murray, 1967. *The Aged Population of the United States*. Social Security Administration, Research Report, No. 19, Washington, D.C.: U.S. Government Printing Office, p. 71.

Table 20.—Homeownership among Nonfarm Families by Age-of-Head Groups, 1949-1969

Age of head	1949	1954	1960	1965	1969
All age groups . . .	50%	56%	58%	63%	61%
Under 25 . . .	21	17	14	19	12
25-34	35	42	44	47	47
35-44	53	57	64	69	72
45-54	59	63	69	75	73
55-64	62	66	62	71	70
65+	59	63	65	71	71

Sources: For 1949, 1954, 1960, and 1965, from *1965 Survey of Consumer Finances*, 1966, p. 117; for 1969, from *1969 Survey of Consumer Finances*, 1970. Ann Arbor, Michigan: Survey Research Center, University of Michigan.

Table 21.—Incidence of Poverty Among Aged Units in 1962: Actual vs. Potential Income at Alternative Poverty Lines

Poverty income* (A for couples) (B for single)	% of aged units in poverty								
	Married couples			Nonmarried men			Nonmarried women		
	Actual income	Potential Home excluded	income Home included	Actual income	Potential Home excluded	income Home included	Actual income	Potential Home excluded	income Home included
1. A \$2,000	29	25	17	57	48	43	69	66	54
B 1,500									
2. A 1,800	22	19	13	57	48	43	69	66	54
B 1,500									

Source: Yung-Ping Chen, 1966. "Economic Poverty: The Special Case of the Aged," *The Gerontologist* 6(1), p. 42.

* These poverty income levels approximate those specified in the weighted averages for (I) a nonfarm family of two persons with head age 65 or over (\$1,850) and (II) a nonfarm single person age 65 or over (\$1,480 for a male and \$1,465 for a female). See Mollie Orshansky, 1965, "Counting the Poor: Another Look at the Poverty Profile," *Social Security Bulletin*, January, p. 28.

Table 22.—Median Liquid Assets* by Age of Head Groups, 1960-1969

Age	1960	1960 (owners only)	1963	1965	1968	1969	1969 (owners only)
All age groups	\$500	\$900	\$440	\$570	\$660	\$730	\$1,690
Under 25	400	700	145	80	190	200	350
25-34			255	320	390	390	620
35-44	700	900	450	650	660	760	1,250
45-54	800	1,100	710	1,200	770	890	2,010
55-64			765	960	1,150	1,740	4,750
65+	1,000	3,000	1,215	1,630	1,350	2,130	6,570

Sources: For 1960, *1960 Survey of Consumer Finances*, 1961, pp. 124, 130-33; for 1963, *1963 Survey of Consumer Finances*, 1964, p. 100; for 1965-1969, *1969 Survey of Consumer Finances*, 1970, p. 100. Ann Arbor, Michigan: Survey Research Center, University of Michigan.

* Liquid assets include checking accounts, savings accounts (with banks, credit unions, and savings and loan associations), and non-marketable U.S. Government bonds.

Table 23.—Proportion of Age of Head Groups Without Liquid Assets, 1960-1969

Age	1960	1963	1965	1968	1969
All age groups	24%	24%	20%	19%	19%
Under 25	26	27	31	15	16
25-34		22	20	14	15
35-44	20	20	20	19	16
45-54	22	20	17	18	19
55-64		28	17	19	21
65+	30	26	25	24	23

Sources: For 1960, *1960 Survey of Consumer Finances*, 1961, pp. 124, 130-33; for 1963, *1963 Survey of Consumer Finances*, 1964, p. 100; for 1965, *1965 Survey of Consumer Finances*, 1966, p. 53; for 1968, *1968 Survey of Consumer Finances*, 1969, p. 114; for 1969, *1969 Survey of Consumer Finances*, 1970, p. 103. Ann Arbor, Michigan: Survey Research Center, University of Michigan.

Table 24.—Proportion of Age-of-Head Groups with Liquid Assets More Than \$10,000, 1960-1969

Age	Percent distribution in each age group				
	1960	1963	1965	1968	1969
Under 25	*	1%	*	1%	1%
25-34		1	1%	2	1
35-44	3	3	6	5	5
45-54		8	6	11	11
55-64	8	10	9	16	19
65+	12	12	16	17	22

Sources: For 1960, *1960 Survey of Consumer Finances*. 1961, pp. 130-33; for 1963, *1963 Survey of Consumer Finances*. 1964, p. 100; for 1965, *1965 Survey of Consumer Finances*. 1966, p. 53; for 1968, *1968 Survey of Consumer Finances*. 1969, p. 114; for 1969, *1969 Survey of Consumer Finances*. 1970, p. 103, Ann Arbor, Michigan: Survey Research Center, University of Michigan.

* denotes less than 0.5%.

Table 25.—Consumer Price Index Selected Items, 1960 and 1970^a
U.S. Averages

	1960	Nov. 1970
All items	103.1	137.8
Housing	103.1	139.3
Rent	103.1	125.7
Homeownership costs	103.7	159.3
Property taxes	--	143.2*
Property insurance rates	104.6	155.7
Maintenance and repairs	103.5	156.0
Mortgage interest rates	106.7	149.2
Fuel and utilities	--	120.7
Food	101.4	132.4
Apparel and Upkeep	102.2	135.7
Transportation	103.8	134.4
Private	103.2	130.1
Public	107.0	175.0
Medical Care	108.1	168.7
Drugs and prescriptions	102.3	101.8
Physicians' fees	106.0	171.4
Dentists' fees	104.7	155.6
Examination, prescription, and dispensing of eyeglasses	103.7	141.6
Hospital daily service charges	112.7	300.7
Operating room charges	--	188.9*
X-rays, diagnostic series, upper G.I.	--	134.4*
Reading/Recreation	104.9	139.3

Source: U.S. Bureau of Labor Statistics. 1971. *The Consumer Price Index for 1970*. Washington, D.C.: U.S. Government Printing Office.

^a Base year is 1957-59 except where (*) is shown which indicates December 1963 as the base.

Table 26.—Percentage Distribution of Families Experiencing or Expecting Income Change by Age-of-Head Groups, 1964–1969

I

	Income change from 1964 to 1965			Expected income change from 1965 to 1966		
	Up	Same	Lower	Higher	Same	Lower
All age groups .	55%	28%	17%	45%	47%	8%
Under 25 . . .	78	12	10	68	23	9
25-34	68	15	17	65	28	7
35-44	63	21	16	53	42	5
45-54	58	24	18	50	41	9
55-64	47	33	20	33	57	10
65+	30	57	13	16	74	10

Source: Survey Research Center, University of Michigan, 1969. *Survey of Consumer Finances*, pp. 25 and 28. Ann Arbor, Mich.: University of Michigan.

II

	Income change from 1967 to 1968			Expected income change in 1969		
	Up	Same	Lower	Higher	Same	Lower
All age groups .	55%	30%	15%	49%	42%	9%
Under 25 . . .	73	15	12	73	19	8
25-34	70	14	16	68	24	8
35-44	65	23	12	60	33	7
45-54	59	27	14	54	37	9
65-74	28	54	18	16	68	16
75+	27	65	8	12	83	5

Source: Survey Research Center, University of Michigan, 1969. *Survey of Consumer Finances*. Ann Arbor, Michigan: University of Michigan, pp. 25 and 28.

Table 27.—Percentage Distribution of Age-of-Head Groups Experiencing Income Change in Two Successive Years

Age	Income change in two years (Survey year and the previous year)		
	Increase	Same	Decrease
Under 65	42%	37%	20%
65 and over	17%	67%	16%
65-74	18%	62%	18%
75 and over	14%	72%	12%

Source: Unpublished data from *Survey of Consumer Expenditures, 1960-61*. (Tabulated from the General Purpose Tape.) Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C.: U.S. Government Printing Office.

Table 28.—Percentage Distribution of Age-of-Head Groups Experiencing Stable Income for Three Successive Years

Age	Stable income for three years (Survey year and the two previous years)
All age groups	28%
Under 25	10
25-34	14
35-44	22
45-54	25
55-64	33
65+	54

Source: Unpublished data from *Survey of Consumer Expenditures, 1960-61*. (Tabulated from the General Purpose Tape.) Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C.: U.S. Government Printing Office.

Table 29.—OASDHI and OAA: Population Aged 65 and Over Receiving OASDHI Cash Benefits, OAA Payments, or Both, February 1940-1968

Year	Aged population ^a receiving—						Persons receiving both OASDHI and OAA as percent of—	
	OASDHI		OAA		Both OASDHI and OAA, number per 1,000	OASDHI or OAA or both, number per 1,000	OASDHI beneficiaries	OAA recipients
	Number per 1,000		Number per 1,000					
940 ^b	7	.....	217	.....	.....	.....	.....	.....
945 ^b	62	.....	194	.....	.....	.....	.....	.....
950	164	.....	224	.....	22	366	13.4	9.8
955	394	.....	179	.....	34	539	8.7	19.2
960	616	.....	141	.....	41	716	6.7	28.5
965 ^c	752	.....	117	.....	52	817	6.9	44.4
966	770	.....	113	.....	55	828	7.1	48.7
967	826	.....	110	.....	58	877	7.0	53.1
968 ^d	837	.....	105	.....	60	882	7.1	57.2

Source: *Social Security Bulletin, 1968, Social Security Bulletin Annual Statistical Supplement*. Washington, D.C.: U.S. Government Printing Office.

^a Population data on which ratio is based, furnished by Bureau of the Census. Data not adjusted for errors of coverage and of age misreporting.

^b June data. Data not available on population receiving both OASDHI and OAA (concurrent payments).

^c Data for 1965 estimated as of June; concurrent payments represent estimates as of April-June 1965.

^d Data for 1968 estimated as of May.

TABLE 30.—OLD-AGE, SURVIVORS, DISABILITY, AND HEALTH INSURANCE

Fiscal Year Benefit Data

Cash benefits awarded and in current-payment status, fiscal 1970

Type of beneficiary	Benefit awards		Benefits in current-payment status			Amount of benefits paid ^a (in thousands)
	Number	Average amount	Number	Average amount	Monthly rate (in thousands)	
Total monthly beneficiaries	3,669,994	--	25,752,829	--	\$2,559,003	\$28,757,374
Retired workers and dependents	1,816,073	--	16,251,542	--	1,715,194	18,896,702
Retired workers	1,299,429	\$110.90	13,066,466	\$117.10	1,530,042	16,745,663
Wives and husbands	336,180	52.10	2,650,508	60.83	161,227	1,871,890
Children ^b	180,464	42.98	534,568	44.76	23,926	279,149
Disabled workers and dependents	733,833	--	2,567,520	--	233,094	2,778,146
Disabled workers	335,649	124.79	1,435,923	130.53	187,425	2,206,289
Wives and husbands	92,864	40.12	270,585	43.27	11,709	152,017
Children ^b	305,320	36.14	861,012	39.44	33,960	419,840
Survivors of deceased workers	1,084,699	--	6,366,510	--	585,075	6,778,197
Widowed mothers	116,491	79.63	513,880	86.02	44,203	527,653
Children ^b	603,924	72.81	2,672,521	81.93	218,972	2,526,581
Widows and widowers ^c	362,187	94.39	3,150,745	101.21	318,881	3,686,491
Parents	2,097	104.30	29,364	102.84	3,020	37,472
Special age-72 beneficiaries ^d	35,389	--	567,257	--	25,640	304,325
Primary	34,310	--	552,889	45.78	25,310	300,220
Wives	1,079	--	14,368	22.98	330	4,105
Lump-sum death payments ^e	1,257,773	236.78	--	--	--	288,092

Source: Social Security Administration. 1970a. *Monthly Benefit Statistics*, August 26, Washington, D.C.: U.S. Government Printing Office.

^a Exceeds monthly rate of benefits in current-payment status because of the inclusion initial payments of amounts payable for prior months. Distribution by type of monthly benefit estimated.

^b Includes disabled persons aged 18 and over whose disability began before age 18.

^c Includes actuarially reduced benefits for widows and divorced wives aged 60-61; a total of 126,479 such beneficiaries were in current-payment status. Also includes disabled widows and widowers aged 50-61; a total of 45,349 such persons were in current-payment status.

^d Represents benefits authorized by Public Law 89-368 (1966) for certain persons aged 72 and over who are not insured under the regular or transitional insured status provisions of the Social Security Act.

^e Number of lump-sum payments shown were paid on the accounts of 1,216,703 deceased workers; the average amount represents average per deceased worker.

Table 31.—OASDHI and Old Age Assistance: Average Monthly Payments in Current and 1968 Prices, 1950 - 1968

[1968 dollars rounded to nearest five cents]

December	Consumer price index, all items ^a (1957-59=100)	Average monthly retired-worker benefit under OASDHI						Average monthly money payments under—	
		Workers who retired in 1950 ^b		All retired workers with benefits in current-payment status		Widowed mother and 2 children		Old-age assistance, per recipient	
		Current dollars	1968 dollars	Current dollars	1968 dollars	Current dollars	1968 dollars	Current dollars	1968 dollars
1950	87.1	\$49.50	\$70.30	\$43.86	\$62.30	\$93.90	\$133.35	\$43.05	\$61.15
1951	92.2	49.50	66.40	42.14	56.55	93.80	125.85	44.55	59.75
1952	93.0	55.70	74.10	49.25	65.50	106.00	141.00	48.80	64.90
1953	93.6	55.70	73.60	51.10	67.55	111.90	147.90	48.90	64.60
1954	93.2	60.70	80.55	59.14	78.50	130.50	173.20	48.70	64.65
1955	93.5	60.70	80.30	61.90	81.90	135.40	179.10	50.05	66.20
1956	96.2	60.70	78.05	63.09	81.10	141.00	181.30	53.25	68.45
1957	99.1	60.70	75.75	64.58	80.60	146.30	182.60	55.50	69.30
1958	100.8	60.70	74.15	66.35	81.05	151.70	186.15	56.95	69.90
1959	102.3	65.00	78.60	72.78	88.00	170.70	206.40	56.70	68.55
1960	103.9	65.00	77.40	74.04	88.15	188.00	223.85	58.90	70.15
1961	104.5	65.00	76.95	75.65	89.55	189.30	224.10	57.60	68.20
1962	105.8	65.00	76.00	76.19	89.10	190.70	222.95	61.55	71.95
1963	107.6	65.00	74.75	76.88	88.40	192.50	221.30	62.80	72.20
1964	108.8	65.00	73.90	77.57	88.20	193.40	219.90	63.65	72.35
1965	111.0	69.60	77.55	83.92	93.55	219.80	244.95	63.10	70.30
1966	114.7	69.60	75.05	84.35	90.95	221.90	239.30	68.05	73.40
1967	118.2	69.60	72.85	85.37	89.35	224.40	234.85	70.15	73.40
1968	123.7	78.70	78.70	98.86	98.86	257.10	257.10	69.55	69.55

Source: *Social Security Bulletin*, 1968, *Social Security Bulletin Annual Statistical Supplement*. Washington, D.C.: U.S. Government Printing Office, p. 31.

^a Data from the Bureau of Labor Statistics.

^b Data reflect for the worker retiring in 1950 (September-December), with the average monthly benefit then payable to those who qualify under the insured-status provisions of the 1939 amendments, the subsequent changes in his benefit resulting from legislative liberalizations.

Table 32.—Private Pension and Deferred Profit-Sharing Plan^a: Estimated Coverage, Contributions, Beneficiaries, Benefit Payments, and Reserves, 1950, 1955, 1960–1968

Year	Coverage, ^b end of year (in thousands)			Employer contributions (in millions)			Employee contributions (in millions)		
	Total	Insured	Non-insured	Total	Insured	Non-insured	Total	Insured	Non-insured
1950. . . .	9,800	2,600	7,200	\$1,750	\$720	\$1,030	\$330	\$200	\$130
1955. . . .	15,400	3,800	11,600	3,280	1,100	2,180	500	280	280
1960. . . .	21,200	4,900	16,300	4,740	1,190	3,550	790	300	490
1961. . . .	22,200	5,100	17,100	4,870	1,180	3,690	800	200	510
1962. . . .	23,100	5,200	17,900	5,190	1,240	3,950	850	310	540
1963. . . .	23,800	5,400	18,400	5,510	1,390	4,120	870	300	570
1964. . . .	24,600	6,000	18,600	6,170	1,520	4,050	930	320	610
1965. . . .	25,400	6,300	19,100	7,040	1,740	5,300	1,030	360	670
1966. . . .	26,100	7,000	19,400	7,730	1,830	5,900	1,070	370	700
1967. . . .	27,000	7,800	19,800	8,510	2,010	6,500	1,150	390	760
1968. . . .	28,200	8,100	20,100	9,380	2,280	7,100	1,200	420	840

Year	Number of beneficiaries, end of year (in thousands)			Amount of benefit payments (in millions)			Reserves, end of year (in billions)		
	Total	Insured	Non-insured	Total ^c	Insured	Non-insured	Total	Insured	Non-insured
1950. . . .	450	150	300	\$370	\$80	\$290	\$12.1	\$5.6	\$6.5
1955. . . .	980	200	600	850	180	670	27.5	11.3	16.1
1960. . . .	1,780	540	1,240	1,750	390	1,360	52.0	18.8	33.1
1961. . . .	1,910	570	1,340	2,000	450	1,550	57.8	20.2	37.5
1962. . . .	2,100	630	1,470	2,340	510	1,830	63.5	21.6	41.9
1963. . . .	2,280	690	1,590	2,570	570	2,000	69.9	23.3	46.5
1964. . . .	2,490	740	1,750	2,890	640	2,250	77.2	25.2	51.9
1965. . . .	2,750	790	1,960	3,370	720	2,650	85.4	27.3	58.1
1966. . . .	3,110	870	2,210	3,910	810	3,100	93.9	29.4	64.5
1967. . . .	3,420	940	2,480	4,410	910	3,500	103.9	32.0	71.8
1968. . . .	3,760	1,000	2,760	5,030	1,030	4,060	115.3	35.0	80.3

Source: Walter W. Kolodrubetz, 1970. "Private and Public Retirement Pensions: Findings from the 1968 Survey of the Aged," *Social Security Bulletin*, September, 3-22. Washington, D.C.: U.S. Government Printing Office.

^a Includes pay-as-you-go, multi-employer, and union-administered plans, those of nonprofit organizations, and railroad plans supplementing the Federal Railroad Retirement Program. Insured plans are underwritten by insurance companies; non-insured plans are, in general, funded through trustees.

^b Excludes annuitants; employees under both insured and noninsured plans are included only once—under the insured plans.

^c Includes refunds to employees and their survivors and lump-sums paid under deferred profit-sharing plans.

Table 33.—Age Of Head—Families And Unrelated Individuals By Total Money Income In 1969, For The United States
(Families and unrelated individuals as of March 1970)

Total money income	Families							Unrelated individuals						
	Total	Age of head (years)						Total	Age (years)					
		14 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 and over		14 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 and over
Number thousands..	51,237	3,524	10,608	10,884	10,829	8,314	7,078	14,452	1,735	1,537	1,092	1,742	2,724	5,622
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under \$1,000	1.6	3.7	1.2	1.1	0.9	1.7	2.6	13.7	22.9	6.1	9.7	11.5	11.9	15.2
\$1,000 to \$1,499	1.3	1.6	0.8	0.7	0.7	1.4	3.6	12.8	8.1	3.0	4.2	4.5	9.9	22.6
\$1,500 to \$1,999	1.8	1.9	0.9	0.7	1.2	1.7	6.0	10.6	7.8	4.0	4.3	6.0	7.8	17.2
\$2,000 to \$2,499	2.4	4.3	1.4	0.9	0.9	2.0	7.9	7.9	7.7	3.8	4.3	6.5	5.0	11.7
\$2,500 to \$2,999	2.2	3.2	1.2	0.9	1.0	2.0	7.3	5.8	7.1	2.0	3.7	3.1	6.5	7.4
\$3,000 to \$3,499	2.6	4.1	1.7	1.4	1.4	2.4	7.0	5.1	6.6	4.4	3.7	5.2	6.0	4.6
\$3,500 to \$3,999	2.7	4.2	2.0	1.5	1.7	2.2	7.0	5.1	7.5	3.1	3.6	5.7	5.8	4.3
\$4,000 to \$4,999	5.4	9.0	4.5	3.4	3.7	5.4	10.6	7.7	9.5	8.2	8.4	10.9	10.6	4.6
\$5,000 to \$5,999	5.9	11.0	5.8	4.8	4.1	5.8	8.3	6.7	8.0	11.6	8.2	9.6	7.8	3.3
\$6,000 to \$6,999	6.4	10.4	7.5	5.4	5.0	6.4	6.6	6.1	5.8	11.8	9.1	8.7	7.8	2.3
\$7,000 to \$7,999	7.3	11.3	8.7	6.6	5.9	7.5	6.0	5.0	4.1	10.2	10.7	7.8	5.4	1.8
\$8,000 to \$8,999	7.4	9.2	9.8	7.6	6.4	6.9	4.7	3.4	2.1	8.9	6.1	4.7	3.8	1.2
\$9,000 to \$9,999	7.0	7.5	9.2	7.5	6.1	7.2	4.0	2.1	0.8	5.3	3.8	2.8	2.6	0.8
\$10,000 to \$11,999	13.0	9.7	17.0	15.8	13.7	11.0	5.7	3.1	0.8	7.7	7.6	4.8	3.9	0.8
\$12,000 to \$14,999	13.7	6.5	15.1	17.8	16.8	13.0	4.9	2.5	0.8	5.0	6.6	4.1	3.0	0.8
\$15,000 to \$24,999	15.6	2.2	12.1	19.9	23.9	17.8	5.6	1.8	0.3	2.8	5.3	3.1	1.8	1.0
\$25,000 to \$49,999	3.2		1.0	3.6	5.8	5.0	1.8	0.5	-	0.9	0.6	1.1	0.4	0.4
\$50,000 and over	0.4	(Z)	0.2	0.5	0.7	0.6	0.3	0.1	-	0.2	-	-	-	0.1
Median income	\$9,433	\$6,665	\$9,499	\$10,962	\$11,596	\$9,648	\$4,803	\$2,931	\$2,748	\$6,239	\$5,967	\$4,696	\$3,748	\$1,855
Mean income	\$10,577	\$6,842	\$9,942	\$11,974	\$12,933	\$11,353	\$6,722	\$4,248	\$3,164	\$6,741	\$6,484	\$5,557	\$4,613	\$2,884
Head year-round full-time worker:														
Percent of total excluding														
Armed Forces	66.6	53.9	77.9	81.6	78.7	67.7	14.0	35.3	30.6	67.8	68.5	61.3	47.8	7.3
Median income	\$11,161	\$8,091	\$10,313	\$11,734	\$12,600	\$11,221	\$8,935	\$6,246	\$5,178	\$7,180	\$7,171	\$6,331	\$5,831	\$4,687
Mean income	\$12,482	\$8,366	\$10,918	\$12,952	\$14,100	\$13,041	\$11,096	\$6,926	\$5,147	\$7,983	\$7,827	\$7,173	\$6,399	\$5,910

Source: U.S. Bureau of the Census, 1970d. *Current Population Reports, Consumer Income* (Series P-60, No. 70) Washington, D.C.: U.S. Government Printing Office, p. 4.

- Represents zero. Z Less than 0.05 percent.

Table 34.—Age—Persons 14 Years Old and Over by Total Money Income in 1969, By Sex, for the United States
(Persons 14 years old and over as of March 1970)

Total money income	Male								Female							
	Age (years)								Total	Age (years)						
	14 to 19	20 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 and over	14 to 19		20 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 and over	
Number of persons thous ..	69,027	11,125	7,067	12,045	11,087	11,081	8,561	8,062	76,277	11,220	8,356	12,576	11,717	11,972	9,599	10,837
Number of persons with income ... thous ..	63,882	6,777	6,721	11,943	11,039	10,992	8,452	7,958	50,224	5,598	6,473	7,462	7,359	7,764	6,501	9,067
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
\$1 to \$499 or less	6.1	42.8	5.0	1.2	0.9	1.3	1.7	1.3	15.7	52.6	12.8	15.0	13.6	10.0	10.4	6.2
\$500 to \$999	4.8	21.4	7.7	0.8	1.2	1.1	2.3	6.5	13.4	17.6	11.3	8.8	8.1	8.1	12.8	25.3
\$1,000 to \$1,499	4.6	11.4	7.3	1.2	1.0	1.4	3.3	12.4	11.3	10.8	9.1	8.2	7.1	7.5	10.1	23.2
\$1,500 to \$1,999	4.0	6.7	6.7	1.3	0.9	1.9	3.0	11.8	7.7	5.6	8.4	5.9	5.6	5.5	7.0	14.2
\$2,000 to \$2,499	4.1	5.8	7.5	1.8	1.3	1.6	3.3	11.3	7.0	4.6	8.2	6.7	6.4	6.4	6.4	9.1
\$2,500 to \$2,999	3.4	3.1	6.1	1.3	1.1	1.6	3.4	10.3	5.0	2.4	6.0	5.4	6.0	4.7	5.8	4.3
\$3,000 to \$3,999	6.6	3.9	12.7	5.1	3.3	4.5	6.5	13.7	10.9	3.0	14.7	13.1	13.7	13.7	11.2	6.2
\$4,000 to \$4,999	6.2	2.1	9.8	6.4	5.0	5.4	7.2	8.1	8.9	2.1	12.3	10.8	11.5	12.1	10.1	3.2
\$5,000 to \$5,999	7.0	1.3	10.5	9.1	6.9	6.8	8.0	5.4	6.9	0.8	9.1	9.0	9.6	9.9	7.3	2.4
\$6,000 to \$6,999	7.6	0.7	8.8	10.5	8.4	8.4	8.6	4.4	4.8	0.2	4.7	7.1	6.5	7.4	5.7	1.7
\$7,000 to \$7,999	8.3	0.3	7.8	11.6	10.2	10.6	9.3	3.3	3.1	0.1	2.0	4.5	4.5	5.2	4.0	1.0
\$8,000 to \$9,999	13.3	0.2	6.3	20.6	18.7	17.3	15.2	4.1	2.8	0.1	1.0	3.9	4.1	5.0	4.2	1.2
\$10,000 to \$14,999	16.2	0.2	3.5	22.4	27.0	24.1	17.6	4.0	1.9	0.1	0.3	1.4	3.0	3.5	4.0	1.0
\$15,000 to \$24,999	6.1	(Z)	0.2	5.9	11.2	10.2	7.5	2.2	0.4	--	(Z)	0.1	0.4	0.6	0.8	0.5
\$25,000 and over	1.8	--	(Z)	0.8	2.9	3.7	3.0	1.2	0.1	--	--	0.1	0.1	0.3	0.3	0.2
Median income	\$6,429	\$667	\$3,763	\$7,974	\$9,045	\$8,619	\$7,279	\$2,828	\$2,132	\$475	\$2,515	\$3,000	\$3,237	\$3,558	\$2,791	\$1,397
Mean income	\$7,202	\$1,099	\$4,149	\$8,378	\$10,042	\$9,873	\$8,405	\$4,306	\$2,945	\$872	\$2,807	\$3,309	\$3,592	\$3,956	\$3,594	\$2,170
Year-round full-time workers:																
Percent of total ex- cluding Armed Forces	59.0	6.2	40.8	78.9	84.0	80.8	69.7	14.2	30.7	6.4	34.5	37.3	42.6	49.5	39.9	5.1
Median income	\$8,668	\$3,150	\$6,169	\$8,678	\$9,625	\$9,307	\$8,399	\$6,581	\$5,077	\$3,405	\$4,648	\$5,352	\$5,236	\$5,302	\$5,152	\$4,705
Mean income	\$9,737	\$3,348	\$6,164	\$9,185	\$10,742	\$10,767	\$9,781	\$8,356	\$5,405	\$3,307	\$4,594	\$5,433	\$5,564	\$5,665	\$5,780	\$5,415

Source. U.S. Bureau of the Census. 1970d. *Current Population Reports, Consumer Income* (Series P-60, No. 70) Washington, D.C.: U.S. Government Printing Office, p. 5.

- Represents zero. Z Less than 0.05 percent.

Table 35.—Median Income of Aged Units by Marital Status and Work Experience, 1962 and 1967

Marital status	Median income	
	1962	1967
Married couples:		
With usually full-time work	\$4,670	} \$4,691
With usually part-time work	3,020	
Did not work	2,350	2,621
Nonmarried men:		
With usually full-time work	3,720	} 2,518
With usually part-time work	1,475	
Did not work	1,225	1,516
Nonmarried women:		
With usually full-time work	2,440	} 2,200
With usually part-time work	1,620	
Did not work	930	1,162

Sources: For 1962, Lenore A. Epstein and Janet H. Murray, 1967, "The Aged Population of the United States," *The 1963 Social Security Survey of the Aged*, Tables 3, 4, p. 289. U.S. Department of Health, Education, and Welfare, Research Report No. 19. Washington, D.C.: U.S. Government Printing Office. For 1967, Lenore E. Bixby, 1970, "Income of People Aged 65 and Older: Overview from the 1968 Survey of the Aged," *Social Security Bulletin*, April, 3-34. Washington, D.C.: U.S. Government Printing Office, p. 19, Table 9.

Table 36.—Distribution of the Aged by Labor Force Status, 1970
(Annual Averages)

	Number in thousands	Percent of total
Employed	3,117	16.4%
Agricultural.	470	2.5%
Non-Agricultural	2,647	13.9
Not at work.	218	1.1
At work	2,429	12.8
Full time	1,393	7.3
Involuntary part time	81	.4
Voluntary part time	955	5.0
Unemployed	104	0.5
Not in the labor force 15,775		83.0
Ill health	1,546	8.1
Keeping house	8,534	44.9
Retirement	5,316	28.0
Think cannot get job.	97	.5
All other reasons	282	1.5
Total	18,996	100.0

Sources: Calculated from *Employment and Earnings*, Vol. 17, No. 7, January 1971, Bureau of Labor Statistics, U.S. Department of Labor. Washington, D.C.: U.S. Government Printing Office, pp. 121, 125, 131, and 136; and unpublished data through the courtesy of Margaret D. Dorsey, Office of Manpower and Employment Statistics, Division of Employment and Unemployment Analysis, U.S. Department of Labor.

Table 37.—Comparison of Aged and Younger Persons by Various Labor Force Characteristics, 1970
(Annual Averages)

	(Number in thousands)		
	65+ Aged	16-64 Younger	Aged as percent of total
Civilian noninstitutional population	18,996	117,999	13.9
Unemployed	104	3,984	2.5
Involuntary nonagricultural part time	81	2,115	3.7
Discouraged job-seekers (Type I)	97	541	15.2
Discouraged job-seekers (Type II)	141	1,433	9.0
Total	423	8,073	

Sources: Calculated from *Employment and Earnings*, Vol. 17, No. 7, January 1971, Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C.: U.S. Government Printing Office, pp. 121, 125, 131, and 136; and unpublished data through the courtesy of Margaret D. Dorsey, Office of Manpower and Employment Statistics, Division of Employment and Unemployment Analysis, U.S. Department of Labor.

Table 38.—Median Income of Aged Units by Marital and OASDHI Beneficiary Status, 1962 and 1967

Marital status	Median income	
	1962	1967
Married Couples:		
Beneficiaries ^a	\$2,710	\$3,199
Nonbeneficiaries	3,580	5,218
Nonmarried Men:		
Beneficiaries ^a	1,375	1,742
Nonbeneficiaries	1,145	1,322
Nonmarried Women:		
Beneficiaries ^a		
Retired	1,300	1,412
Widowed	1,105	1,230
Nonbeneficiaries	755	1,032

Sources: For 1962 data, Lenore A. Epstein and Janet Murray. 1967. "The Aged Population of the United States." *The 1963 Social Security Survey of the Aged*, Social Security Administration, Research Report No. 19. Washington, D.C.: U.S. Government Printing Office, p. 288, Table 3.3. For 1967 data, Lenore E. Bixby. 1970. "Income of People Aged 65 and Older: Overview from the 1968 Survey of the Aged." *Social Security Bulletin*, April, 3-34. Washington, D.C.: U.S. Government Printing Office, p. 12, Table 4. Patience Lauriat. 1970. "Benefit Levels and Characteristics." *The 1968 Social Security Survey of the Aged. Social Security Bulletin*, August, Washington, D.C.: Government Printing Office, p. 11, Table 4.

^a Excludes part-year and parent beneficiaries in 1962; excludes beneficiaries who received their first benefits in February 1967 or later, transitionally insured; and special age-72 beneficiaries in 1967.

Table 39.—Taxable Earnings as Percent of Total Earnings of Wage and Salary and Self-Employed Workers Under OASDHI, 1951–1966

Year	Maximum earnings taxable and creditable	Taxable as percent of total:	
		Wages and salaries	Self-employment earnings
1951.	\$3,600	84.0	57.9
1952.	3,600	82.8	59.6
1953.	3,600	80.7	58.8
1954.	3,600	79.6	60.0
1955.	4,200	82.6	64.2
1956.	4,200	81.2	62.7
1957.	4,200	79.8	61.2
1958.	4,200	78.4	61.7
1959.	4,800	81.6	62.6
1960.	4,800	79.9	63.0
1961.	4,800	79.3	62.5
1962.	4,800	77.7	59.8
1963.	4,800	76.4	59.0
1964.	4,800	74.4	56.5
1965.	4,800	74.1	49.3
1966.	6,600	83.0	56.1
1967.	6,600	81.3	55.6
1968.	7,800	84.2	58.7

Source: *Social Security Bulletin, 1968, Annual Statistical Supplement*.
Washington, D.C.: U.S. Government Printing Office.

Table 40.—All Workers and 4-Quarter Workers with Taxable Earnings: Percent with Total Annual Earnings below Annual Maximum Taxable, by Sex, 1937–1968

Year	Annual maximum taxable earnings	All workers ^a			4-quarter workers ^{a, b}		
		Total	Men	Women	Total	Men	Women
1937	\$3,000	96.9	95.8	99.7	.....	.....	.....
1940	3,000	90.6	95.4	99.7	94.7	93.1	99.5
1945	3,000	86.3	78.6	98.9	76.1	64.9	97.9
1950	3,000	71.1	59.9	94.6	56.4	43.2	90.4
1951	3,600	75.5	64.8	96.7	65.2	53.6	91.4
1952	3,600	72.2	60.1	95.4	60.7	47.9	92.4
1953	3,600	68.9	55.6	93.8	56.2	42.5	80.7
1954	3,000	68.4	55.5	93.0	55.8	42.2	88.6
1955	4,200	74.3	63.3	95.9	64.7	53.5	93.2
1956	4,200	71.5	59.6	94.5	61.7	50.1	91.1
1957	4,200	70.3	59.0	93.2	60.9	50.3	89.1
1958	4,200	69.6	58.7	91.7	59.6	46.9	80.9
1959	4,800	73.3	62.7	94.3	64.4	54.0	90.9
1960	4,800	71.9	60.8	93.4	62.5	51.6	89.6
1961	4,800	70.8	59.6	92.4	61.1	50.2	88.0
1962	4,800	68.8	57.1	91.1	58.8	47.6	86.1
1963	4,800	67.5	55.4	90.0	56.9	45.5	84.3
1964	4,800	65.5	53.1	88.6	54.3	42.5	82.0
1965	4,800	63.9	51.0	87.3	52.0	39.9	80.0
1966	6,600	75.8	64.3	95.6	67.5	56.2	93.0
1967 ^c	6,600	74.1	62.1	94.4	65.3	53.5	91.2
1968 ^c	7,800	79.3	68.9	96.5	71.1	60.3	94.2

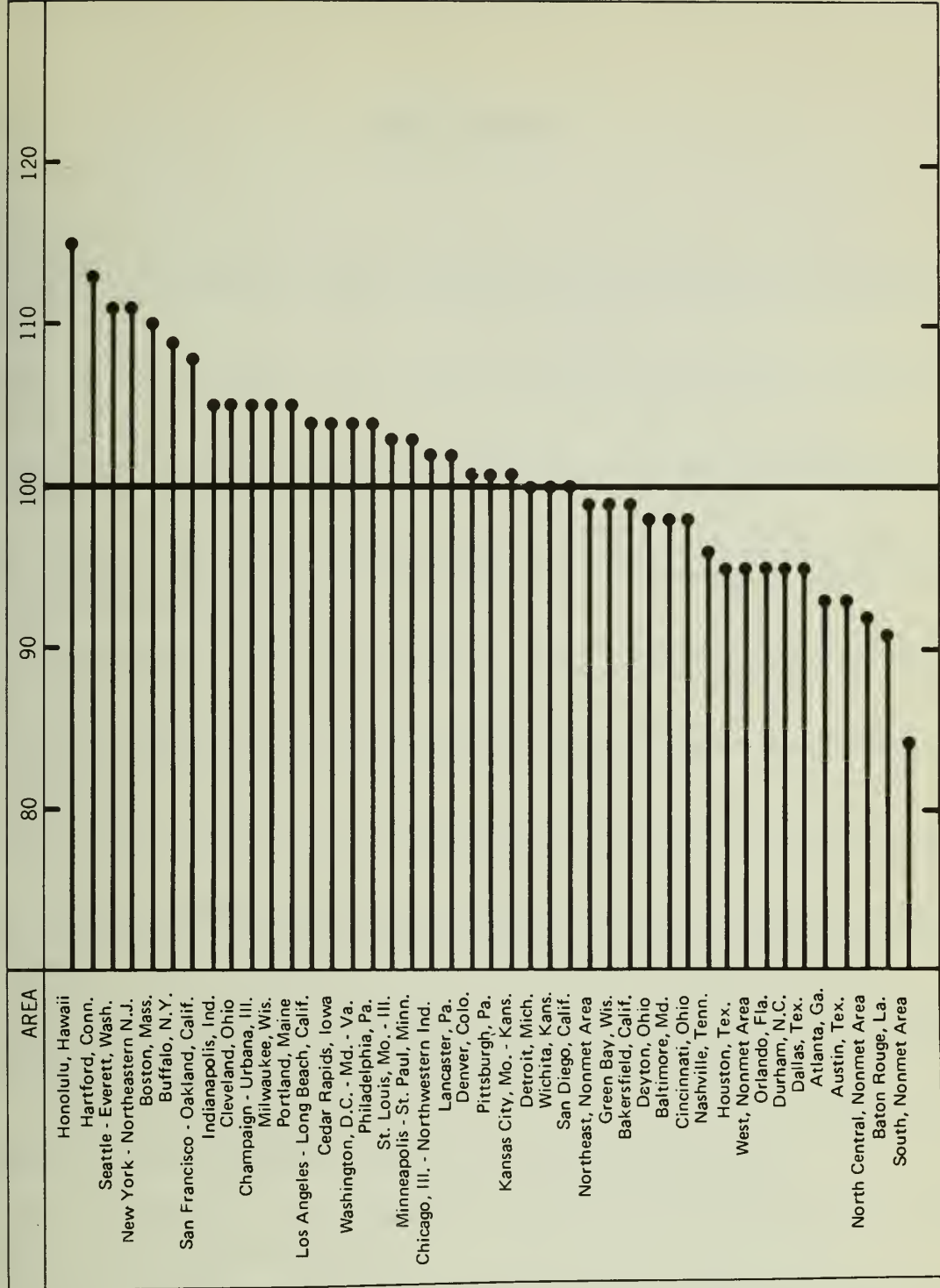
Source: *Social Security Bulletin, 1968, Annual Statistical Supplement*. Washington, D.C.: U.S. Government Printing Office.

^a For 1937-50, relates to wage and salary workers. Beginning 1951, includes self-employment.

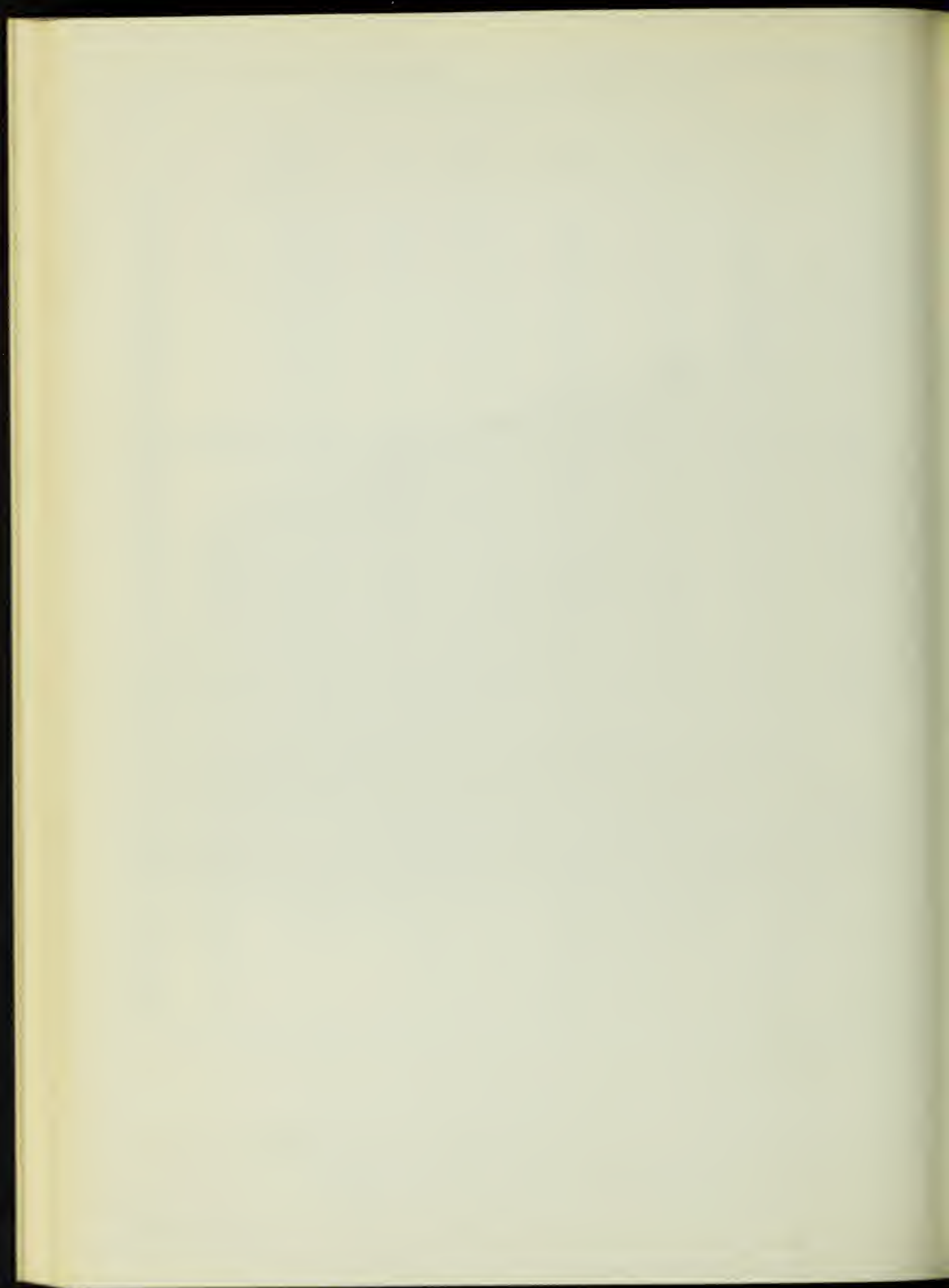
^b For 1938-54, relates to all wage and salary workers with earnings reported in each calendar quarter or who earned the annual maximum taxable wages. Beginning 1951, includes all self-employed persons; and, beginning 1955, includes farm workers with \$400 or more in annual farm wages and other combinations of farm and nonfarm wage and salary employment. Data for 1937 are not available.

^c Preliminary data.

U.S. Urban Average Costs = 100



Source: U.S. Bureau of Labor Statistics, 1970, "3 Budgets for a Retired Couple in Urban Areas of the United States 1967 - 68," *Bulletin* 1570 - 6. Washington, D.C.: U.S. Government Printing Office p. 32.



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APPENDIX A. DERIVING THE POVERTY INDEX¹

The derivation of the index has been reported in detail in the *Social Security Bulletin* for January 1965. Only an abridged discussion is included below, with some additional evidence now available that lends credence to the index as a discriminant.

With no market basket to demarcate the line below which deprivation is almost inevitable and above which a limited measure of adequacy is at least possible, an adaptation was made of a principle most of us learn by heart: As income increases, families spend more dollars for food, but this larger amount takes a smaller share of income, leaving proportionately more money for other things. Accordingly, a low percentage of income going for food can be equated with prosperity and a high percentage with privation. Economists looking for a quick way to assess the relative well-being of dissimilar groups have long resorted to this device.

This procedure was followed but with an important modification. It was assumed that equivalent levels of adequacy were reached only when the proportion of income required to purchase an adequate diet was identical. The fact that in practice large families often seem to spend more of their income on food turns out on analysis to come about only because on the average the large families, particularly those with several children, have lower incomes than small families. The procedure had the important merit that for food a measure of adequacy is available in the Department of Agriculture food plans. Adequacy standards for other categories of family living are not available.

The food plans priced for nonfarm families today include both the low-cost one well known to welfare agencies and a newer economy level plan, costing about one-fourth less, designed for short-term use when funds are extremely low. Most families spend considerably more. In 1955, the latest year for which there are details, only one-tenth of all nonfarm families spent less than the economy plan. Today, 10 years later the number with such meager food outlays is no doubt even smaller. With this plan, adequate nutrition is attainable, but in practice nearly half the families spending so little fall far short of adequacy: Of families spending at this rate in 1955, more than 40 percent had diets providing less than two-thirds their requirements for one or more nutrients.²

The kind of diet made possible by the economy plan was taken to typify one level of living to be represented by the poverty index, and the low-cost plan an alternative higher level. A representative combination of members by age and sex was developed for families of given size and type, and the food-plan cost determined. On the basis of average spending patterns observed in 1955 among both farm and nonfarm families, it was decided that the total should represent no more than one-third of income, although at today's higher incomes, families currently average more nearly \$1 out of \$4 for their food than \$1 out of \$3.

For families of two persons, on the basis of the 1955 pattern, only 27 percent of income was assigned to food, because so small a unit will have heavier per capita fixed expenses than a larger unit. One-person households, for whom reliable data were lacking, were assumed to need 80 percent as much as the appropriate 2-person unit at the economy level and

Sources: ¹Mollie Orshansky, "Who's Who Among the Poor: A Demographic View of Poverty," *Social Security Bulletin*, (July, 1965), 8-9. The poverty index has been updated each year in accordance with price level changes.

²Betty B. Peterkin, "USDA Food Plans and Costs—Tools for Deriving Food Cost Standards for Use in Public Assistance," *Family Economic Review* (Department of Agriculture), March 1965.

72 percent as much at the low-cost level. The lower the income and the more restricted the budget, the more difficult it will be to cut such expenses as housing and utilities below the minimum for a couple.

For the poverty index the total food allowance was cut down to the current cost of the economy plan assuming all food prepared at home. Retaining the same proportion of income allotted to food as that for families spending much more implied that other items of family living could be reduced to the same degree. Admittedly this procedure is unrealistic, particularly with respect to housing, which looms so large in the nonfarm family budget. Judicious management can cut food costs at the sacrifice of dietary adequacy if need be, but the slum landlord is not likely to be satisfied with cheaper rent. For large families in the low-income range, many of them nonwhite, obtaining any housing at a price they can afford is difficult. Many welfare agencies in allotting funds have to budget rent as paid by their clients. There were, however, no available budget standards for housing that could be applied at the poverty level.

Data now available for 1960-61 suggest that nonfarm families then averaged 23.5 percent of aggregate income for food. Actually, however, it was only families with incomes of \$6,000 or more that averaged food costs in this range. With incomes of \$2,000-\$3,000, families of two or more were devoting a third of income to food—the ratio assumed for the poverty index. Families in this income class, averaging slightly more than three persons, reported a per capita outlay for all food of \$5.25 a week. The \$4.55 spent for food at home is almost identical with the cost of the economy plan in 1964 for a 4-person family. At this rate, the critical income—that is, the poverty line—for such a family would be set at \$3,150, compared with the \$3,130 derived *a priori*.

APPENDIX B. THREE BUDGETS FOR A RETIRED COUPLE¹

How much does it cost a retired couple to live, and what does it cost in one area as compared to another? These are two of the most often asked questions by couples who are retired or about to retire. A spring 1967 study released by Charles Roumasset, Pacific Regional Director of the U.S. Department of Labor's Bureau of Labor Statistics, attempts to provide answers to these questions.

The study shows the costs of budgets for a self-supporting retired couple in 40 urban areas at three levels of living. Roumasset indicated that this study presents for the first time budget data for a retired couple at a higher and lower level as well as at the intermediate level. The intermediate budget is comparable to the autumn 1966 moderate budget published in June 1968. Budget costs are presented for seven areas in the Pacific Region² and 33 other U.S. urban areas, U.S. urban averages for metropolitan and for nonmetropolitan areas, and averages for small nonmetropolitan areas in four broad geographic regions: Northeast, North Central, South, and West.

Roumasset pointed out that budget costs at the intermediate level for a retired couple in the Pacific Region in the spring of 1967 ranged from \$3,815 in Bakersfield, California, to \$5,274 in Anchorage, Alaska. At the higher level, costs ranged from \$5,978 in Bakersfield to \$7,960, in Anchorage, and at the lower level, from \$2,650 in Bakersfield to \$3,991 in Anchorage. Roumasset cautioned, however, that rising prices since the spring of 1967 have boosted the cost of goods and services by more than 10 percent.

The budgets have been developed to meet the needs of public assistance agencies, voluntary social and welfare agencies, businesses, labor unions, and individuals concerned with retirement planning.

The retired couple is defined as husband, age 65 or over, and his wife, living independently in a separate dwelling and enjoying reasonably good health. The budgets are based on the manner of living and consumer choices of the 1960's. They permit the couple to maintain its health and well-being, and to participate in community activities. The goods and services were selected as follows: nutritional and health standards, as determined by experts, were used for the food-at-home and housing components. However, the selection among the various kinds of foods and housing arrangements were based on actual choices made by families as revealed by surveys of consumer expenditures. In the absence of standards, the choices reported in the BLS Survey of Consumer Expenditures were used for housefurnishings, household operation, clothing, personal care, reading, recreation, meals away from home, and alcoholic beverages.

The style of living provided by the lower budget differs from the intermediate and higher levels in this manner: A smaller proportion of couples own their homes, dwelling units lack air conditioning, couples rely more on public transportation, they perform more services for themselves, and they make greater use of free recreation facilities.

By contrast, the higher budget assumes the largest proportion of homeowners, provides new cars for some couples, allows more household appliances and equipment, and more paid services than at the intermediate level.

Also, a majority of the items common to the three budgets are in greater quantity and of better quality at each higher level of living.

¹ Adapted from: Release, No. SF BLS 9-88, U.S. Dept. of Labor, Bureau of Labor Statistics, Washington, D.C., October 23, 1969.

² Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, and Washington.

Total budget costs in urban United States in spring 1967 averaged \$2,671 at the lower level, \$3,857 at the intermediate, and \$6,039 at the higher.

Consumption items—food, housing, transportation, clothing, personal care, medical care, and other family consumption in the lower budget cost \$2,556. In addition, an allowance for gifts and contributions amounted to \$115.

The intermediate budget required \$3,626 for consumption items plus \$231 for gifts and contributions, while the higher budget needed \$5,335 for goods and services and \$398 for gifts and contributions. Additional allowances are made in the high budget of \$71 for life insurance premiums and \$235 for personal taxes.

Food

Total food costs at spring 1967 prices averaged \$789 for the lower budget, \$1,048 for the intermediate, and \$1,285 for the higher.

Of total food costs in the lower budget, \$735 was for food at home. Compared with the two higher budgets, the lower food allowance calls for larger quantities of potatoes, dry beans and peas, flour and cereal, and smaller quantities of meat, and poultry and fish.

The family also has an allowance of \$54 which permits them to enjoy a restaurant meal about once a month.

In the intermediate budget, food for home consumption cost \$937 and restaurant meals and snacks \$111. At the top level the couples required \$1,115 for food consumed at home, and \$170 for meals outside the home.

Housing

Urban U.S. housing costs ranged from \$939 in the lower budget to \$2,066 in the higher level. The middle group housing costs amounted to \$1,330.

Shelter—the major expense in the housing total—required an average annual outlay of \$704 for the lowest budget, \$849 for the intermediate, and \$1,188 for the higher level. These amounts are based on the average costs for rented and owned dwellings.

Rental housing which had two or three rooms was specified for 40 percent of the couples at the lower level, 35 percent of the middle level, and 30 percent of the higher level couples. The renter's cost included rent plus estimated costs of fuel and utilities, where these were not part of the rent, and insurance on household effects.

The majority of the families at all budget levels lived in 5- or 6-room mortgage-free homes. Typical homeowner costs for these couples include taxes, insurance, fuel and utilities, and routine repair and maintenance charges. The higher budget provides for greater utility usage and a larger repair and maintenance allowance than the intermediate and lower budgets.

Transportation

Transportation costs stepped up from \$191 at the lower budget level to \$382 for the intermediate, and \$682 for the higher. These allowances provide for ownership and operation of an automobile for some of the couples at each budget level—except for lower budget families in Boston, Chicago, New York, and Philadelphia who rely on public transit.

The budget level and city size determined whether couples owned an automobile and how much they patronized public transit. In the lower budget it was assumed that car owners bought 6-year-old cars; intermediate group owners bought 2-year-old cars as did 45 percent of the higher budget families. For the remaining 55 percent of the higher budget couples, the purchase of a new car was specified.

Clothing and Personal Care

Clothing costs—replacement of the clothing, and materials and services—averaged \$134 for the lower budget couple. The intermediate budget couple needed \$234 and the higher \$371, at spring 1967 prices.

The clothing allowances for husband and wife were about the same in the lower and intermediate budgets. At the higher level, however, the wife's allowance averaged about \$20 more than the husband's.

Personal care costs moved from \$83 for the lower budget to \$123 for the intermediate, and to \$178 for the higher budget. These costs constituted about 3 percent of the total family consumption for the three budgets.

Medical Care

The lower budget couple required \$294 to cover its total medical costs for a year. This was only \$2 less than the intermediate budget couple's \$296, and \$5 less than the top level cost of \$229. Although there is only a \$5 difference between the lower and the higher allowances, in the lower budget medical costs accounted for 12 percent of total family consumption, compared with only 6 percent of family consumption for the higher budget.

The medical care costs include hospital and medical insurance provided by the Federal Medicare program. Also included in the costs are eye examinations and eyeglasses, drugs, and a physical checkup for Medicare enrollees not using Medicare services within a year.

Other Consumption

In the lower budget, "other consumption"—reading, recreation, tobacco, alcohol, and miscellaneous expenses—cost \$126. For these same items, the intermediate budget required \$213 while the higher budget totaled \$454.

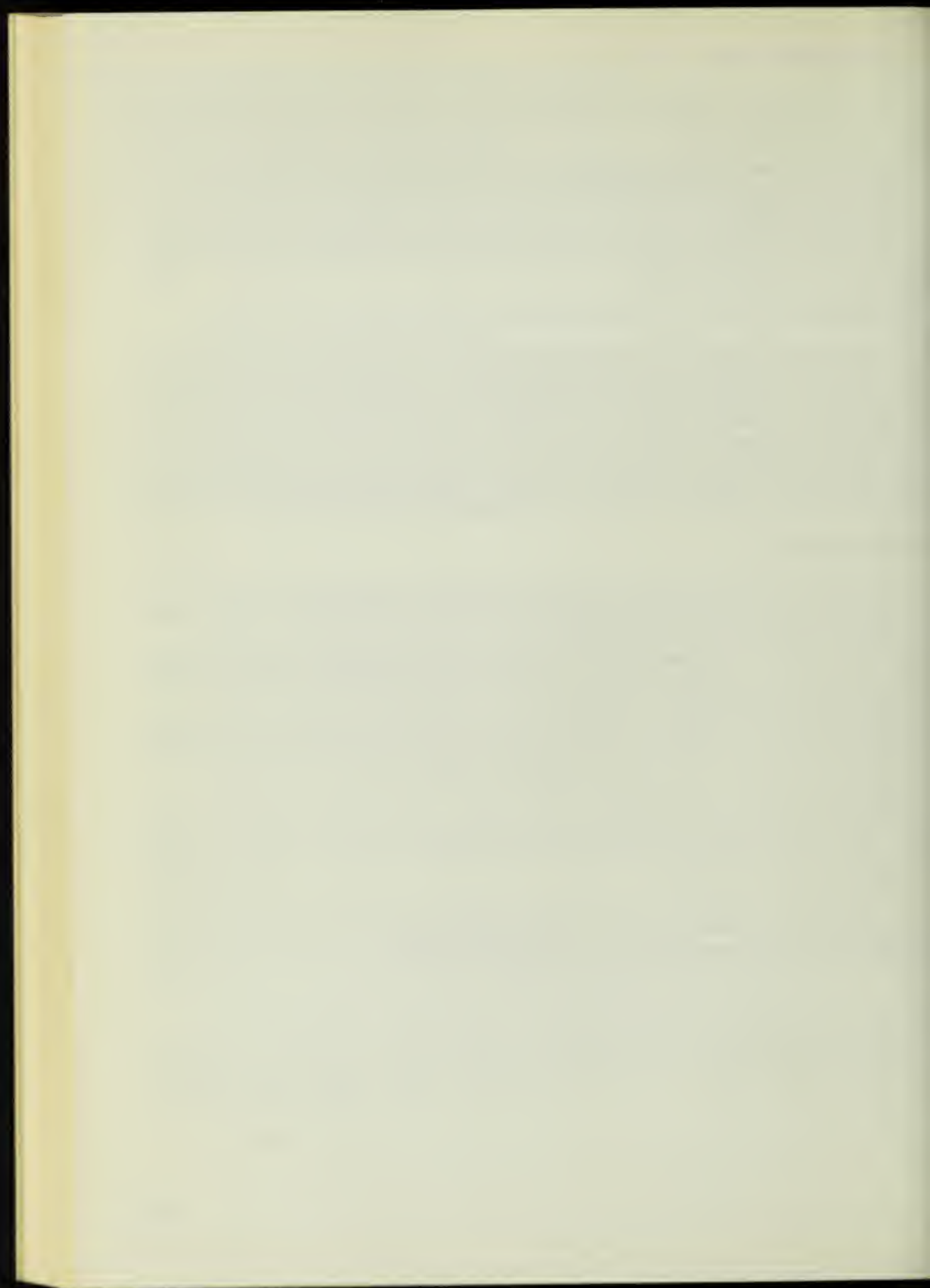
At the lower level, the largest single cost in "other consumption" was reading (\$46), while at the intermediate and higher levels, costs for recreation—\$81 and \$256, respectively—accounted for the largest portions of the item.

Tobacco—cigars or pipes—and alcohol allowances are part of "other consumption" costs. No allowance was made for cigarettes in view of the findings of the U.S. Public Health Service concerning the effects of cigarette smoking on health.

Living Cost Differences Among Cities

All indexes relate to costs for families established in the areas. They do not measure differences in costs associated with moving from one area to another, or costs incurred by recent arrivals in the community.

Within each budget, the intercity indexes reflect differences among areas in price levels, climatic or regional differences in the quantities and types of items required to provide the specified level of living, and differences in State and local taxes.



APPENDIX C. THREE STANDARDS OF LIVING FOR AN URBAN FAMILY OF FOUR PERSONS¹

How much does it cost to live? Individual answers will differ, depending on the family's size, manner of living and place of residence, but a new Labor Department study gives benchmarks for a carefully defined family of four in different financial circumstances in 39 areas.

The study—*Three Standards of Living for an Urban Family of Four Persons, Spring 1967*—marks the first time the Bureau of Labor Statistics has developed lists of goods and services and cost estimates at three levels: a moderate or intermediate level and levels lower and higher. All three budgets share the basic assumption that maintenance of health and social well-being, the nurture of children, and participation in community activities are desirable and necessary social goals.

For the moderate budget, the U.S. urban average cost was \$9,076 in spring 1967. The cost for the lower budget was \$5,915—35 percent less than the moderate. The higher budget amounted to \$13,050—44 percent above the moderate budget. These figures include costs of consumption—food, housing, transportation, clothing and personal care, medical care, gifts, education and recreation—as well as other expenses, including life insurance, occupational expenses, Social Security payments, and personal taxes. Consumption costs account for 82 percent of the total budget at the lower level, 79 percent at the moderate level, and 76 percent at the higher level. (Updated consumption costs, reflecting price changes since the survey date, are shown on page 67.)

The budgets have been developed to meet the needs of public assistance agencies, voluntary social and welfare agencies, businesses, labor unions, colleges and universities. Users' needs vary widely: some want a measuring rod for public assistance payments; some need a basis for establishing a scale of fees for services rendered; some want guidelines for ascertaining the financial need for scholarships; some want to know just how the "cost of living" varies from place to place.

Social scientists find the budgets useful for evaluating the adequacy of family income, determining the relative economic well-being of different population groups, measuring geographic differences in living costs, and documenting changes in living standards over time.

The budgets prepared by BLS provide benchmarks from which users can make adjustments to relate the information to their specific situations. For example, a welfare administrator may want to adjust the budget to reflect the client family's size and characteristics, the free services provided, and the absence of expenses that go along with holding a job. A private social service agency may want to establish the "fair share" of a family's income that should be devoted to helping, say, an aged and infirm relative without placing an undue burden on the family itself.

ESTIMATING METHODS

The content of the budgets is based on the manner of living and consumer choices in the 1960's. Two kinds of data were used to derive the list of goods and services.

First, nutritional and health standards, as determined by scientists and technicians, were used for the food-at-home and the housing components. The nutritional standards for

¹ Adapted from: Release, No. USDL-10-296, U.S. Dept. of Labor, Bureau of Labor Statistics, Washington, D.C., March 17, 1969.

food are those developed by the National Research Council of the National Academy of Sciences. The housing standards are those established by the American Public Health Association and the U.S. Public Housing Administration. The selection among the various kinds of food and housing arrangements meeting the standards was based on actual choices made by families as revealed by surveys of consumer expenditures.

Second, where scientific standards have not been formulated, analyses of the data reported in the Bureau's Survey of Consumer Expenditures and related consumption studies were used to determine the specific items, and the quantities and qualities thereof.

These analytical procedures result in basing some parts of the budgets upon the collective judgment of consumers rather than upon scientific standards. Some exercise of the budget-maker's own judgment is involved in the construction of these budgets. However, such judgment has been confined to the specification of the manner of living for each budget level, and selection of the basic data and determination of the procedures to be followed in deriving the items and quantities. The procedures used to derive the various levels are described in detail in Chapter V of BLS Bulletin 1570-5. The concepts, procedures, and pricing lists for the moderate standard are described in detail in BLS Bulletin 1570-1 and 1570-3.

ASSUMPTIONS AND LIMITATIONS

Users should keep in mind that the budget-type family is very carefully defined. It consists of a 38-year-old husband, employed full time, a wife not employed outside the household, a boy of 13, and a girl of 8. The family group has average inventories of clothing, home furnishings, major durables, and other equipment. At this middle stage in the life cycle—after about 15 years of married life—the family is well established, and the husband generally an experienced worker.

Users must look beyond the dollars in which the budgets are summed up. For a budget of this type rests on—and must be defined in terms of—the goods and services selected to represent the specified level of living and the procedures used to derive that list.

To enable researchers to prepare comparable estimates for areas not covered by BLS, the budget studies describe in detail the sources of data and estimating methods, list the average annual quantities of items which were used to determine the costs of the three specified levels of living and describe the specifications used in collecting the prices.

While all three budgets provide for a sense of self-respect and social participation, the manner of living differs.

The study points out that the manner of living in the lower budget differs from that in the moderate and higher family budgets primarily in the specifications that the family lives in rental housing (without air conditioning); performs more services for itself; and utilizes free recreation facilities in the community. The manner in the higher budget, on the other hand, specifies a higher level of homeownership, compared with the moderate; an ample automobile allowance; more complete inventories of household appliances and equipment; and more extensive use of services for a fee. Inevitably, higher taxes go along with the income that permits the higher consumption level.

CONSUMPTION COSTS

Family living expenses—including such items as food, housing, clothing, transportation, personal care, medical care, and recreation, but excluding occupational expenses, personal taxes, Social Security and disability payments, gifts and contributions, and life insurance—required an average annual outlay of \$4,862 for the lower budget (See Table 1.).

Consumption costs for the moderate budget came to \$7,221, 49 percent higher than the lower one. The living costs for the higher budget amounted to \$9,963, 105 percent above the lower budget. Although there are only minor variations in the quantities of items consumed at each budget, the qualities of goods and services differ significantly.

TABLE 1.—CHANGES IN CONSUMPTION COSTS

	Lower budget	
	Spring 1967	Autumn 1968
Food	\$1,644	\$1,744
Housing	1,303	1,356
Transportation	446	468
Clothing and personal care	700	758
Medical care	474	517
Other family consumption	295	311
Total family consumption	4,862	5,154

	Moderate budget	
	Spring 1967	Autumn 1968
Food	\$2,105	\$2,235
Housing	2,230	2,311
Transportation	872	912
Clothing and personal care	985	1,069
Medical care	477	520
Other family consumption	552	582
Total family consumption	7,221	7,629

	Higher budget	
	Spring 1967	Autumn 1968
Food	\$2,586	\$2,747
Housing	3,340	3,471
Transportation	1,127	1,179
Clothing and personal care	1,446	1,572
Medical care	497	542
Other family consumption	967	1,022
Total family consumption	9,963	10,533

The lower the budget, the larger the proportion of costs devoted to the necessities of life. The study shows that:

In the lower budget, maintenance of the family's physical health required a third of the cost of family consumption for the purchase of a nutritionally adequate diet, and an additional 10 percent for medical care, including a family membership in a group hospital and surgical insurance plan.

In the moderate standard, adequate food and medical care require only 29 and 7 percent, respectively, of total family consumption.

At the higher standard, food accounts for only about a fourth, and medical care just 5 percent of the total, even though in addition to meeting requirements for health, this standard permits greater choice and variety in diet and includes broader health insurance coverage.

The study also illustrates how differences in family size affect the budget levels. A young couple without children, for example, would need less for living expenses—\$2,380; \$3,540; and \$4,880, respectively, to maintain equivalent levels of living. On the other hand, a family with three schoolage children would need \$5,640; \$8,380; and \$11,550 for consumption goods and services for these three budget levels.

Food

U.S. urban costs for food averaged \$1,644, \$2,105 and \$2,586 in the lower, moderate, and higher budgets, respectively, at spring 1967 prices. Food away from home—lunches at school and work, restaurant dinners, and snacks—amounted to 18 percent of the total food cost in the higher budget, 16 percent in the moderate, and 13 percent in the lower.

Housing

U.S. urban average housing costs amounted to \$1,303 in the lower budget and \$3,340 at the higher. Compared to the moderate budget's \$2,230, the lower budget's housing allowance is 40 percent less, and that of the higher budget is 50 percent above.

Shelter, including heat and utilities—the major expense in the housing total—required an average annual outlay of \$1,013 in the lower budget, where the manner of living was limited to rental housing, and \$1,745 and \$2,308 in the moderate and higher budgets respectively, where the amounts are weighted average costs for renter and homeowner families. The housing total in the higher budget also includes an allowance for occasional stays at hotels and motels.

Housing accounts for one-fourth of the total consumption costs of the lower standard, one-third of the higher standard. While the dwelling specified in the budget still is adequate in space, condition, and plumbing facilities, the higher budget provides many extra facilities.

The lower budget assumes that the family lives in a rental unit, while at the moderate and higher levels the costs reflect the more typical manner of living for families of this type, in which the majority are making mortgage payments on homes they purchased about 7 years ago, the study explains.

Transportation

The cost of transportation in urban areas averaged \$446 in the lower budget and \$1,127 in the higher. Costs in the lower budget were about 50 percent less, and those in the higher budget were 30 percent over the moderate budget.

The differences result largely from the proportions of automobile ownership specified for each budget. For example, in the lower budget, one-half the families in the Boston, Chicago, New York and Philadelphia metropolitan areas were assumed to own automobiles, whereas in the moderate and higher budgets for these cities auto ownership was specified for 80 and 100 percent of the families, respectively.

Transportation costs for automobile owners in the moderate budget averaged \$919. This amount included the replacement of an automobile every four years with a 2-year old used car, operating expenses, insurance, and some public transportation. Costs for auto owners in the lower and higher budgets were one-third below and one-fourth above the cost of the moderate budget.

Compared to the moderate, the lower budget car owner allowance—\$607—includes a smaller mileage allowance for an 8-year old car, fewer repairs—since only the most essential repairs are usually made on cars of this age—no comprehensive insurance, lower personal property tax, and no out-of-town travel on planes, trains, or other public vehicles.

Higher costs—\$1,127—to car owners in the higher budget result from the specification that 60 percent of the families are new car buyers, while the remaining 40 percent buy the same car (2-year-old used) as the one provided in the moderate budget. Also, the insurance coverage has been increased, and more out-of-town travel is provided.

Public transportation for families without automobiles averaged \$107 in the lower budget, or almost one-third below the \$152 cost of the moderate budget. This difference is attributed to an out-of-town travel allowance in the moderate budget which was not included in the lower budget.

Clothing and Personal Care

Total clothing costs, including materials and services, averaged \$767, \$538, and \$1,139 in the moderate, lower, and higher budgets.

Men's clothing cost more than women's in the lower budget, but the relationship was reversed in the moderate and higher budgets, similar to the pattern in actual expenditures for members of budget-type families.

Clothing for the boy—at the beginning of his teen years—was relatively more costly in the three budgets than were the replacement needs for a younger age girl. However, the differential decreased from 29 percent in the lower, to 10 and 6 percent in the moderate and higher budgets, respectively.

Personal care constituted just about 3 percent of total family consumption at the three budget levels, but costs averaged \$162 in the lower and \$307 in the higher budgets. Personal care services represented 38 percent of this component at the lower budget, and 48 and 52 percent at moderate and higher levels respectively, primarily because of increases in the allowances for beauty shop services for the wife.

Medical Care

U.S. urban costs of total medical care were almost identical in the lower and moderate budgets, averaging \$474 and \$477 respectively, since basically the same allowances were used for both budgets.

In actual practice, expenditures for medical care are lower at lower income levels, since many low income families either defer needed treatment or receive it in free clinics. However, as a desirable goal for a self-supporting family, it was considered essential to specify group hospital and surgical insurance coverage for both the lower and moderate budgets.

The higher budget included a major medical insurance policy, supplementing the hospital-surgical coverage, and raising the average U.S. urban insurance cost from \$226 to \$262.

If all families had paid the full cost of their health insurance, it would have increased the total cost of medical care in the three budgets by about 30 percent. However, employers contribute some or all of the cost of group health insurance in the majority of cases, and therefore, in calculating total medical care costs for the budgets, the insurance costs were weighted to reflect the estimated proportions of families who paid all, part, or none of their insurance premiums. On this basis, the weighted insurance costs constitute 20 to 23 percent of the medical component.

Although the difference in medical care costs averaged only about \$25 between the lower and higher budgets, at the lower level, medical care represented about 10 percent of family consumption. For families at the moderate and higher levels, only 7 and 5 percent, respectively, of total consumption was used for this purpose.

Other Consumption Costs

Allowances for reading and education in the lower budget accounted for about one-third of the \$295 allocated to "other consumption" costs which also include costs for recreation, tobacco, alcoholic beverages, and miscellaneous items. Reading and education took

about one-sixth of the "other consumption" total of \$967 in the higher budget. Recreation accounted for barely one-third of "other consumption" in the lower budget, but almost half in the moderate, and more than half in the higher budget.

Allowances in the lower budget assume that families would meet some of their recreational needs by utilizing library and museum facilities, and by taking advantage of community or group-sponsored social and cultural activities and sporting events for which there was no fee.

Allowances for alcohol and tobacco—cigars or pipes—are also included as part of other consumption costs in all three budgets, in accord with prevailing practices in this country. An allowance for cigarettes was eliminated, however, in view of the findings of the U.S. Public Health Service concerning the effects of cigarette smoking on health. Annual costs for alcohol and tobacco, exclusive of cigarettes, averaged \$73 in the lower budget, \$87 in the moderate, and \$116 in the higher budget.

Budgets and Rising Prices

Rising retail prices since spring 1967 have increased the consumption costs for all three budgets. A rough approximation of the fall 1968 costs of family consumption in the three budgets has been calculated (See Table 1), using price changes as reported in the Consumer Price Index for appropriate classes of goods and services. Between spring 1967 and autumn 1968, the Consumer Price Index increased 6.6 percent; the cost of family consumption increased 6.0 percent in the lower budget, and 5.7 percent in both the moderate and higher budgets.

Living Cost Differences Among Cities

For the first time, area measures are available to determine the range in living costs at moderate, lower, and higher levels of living.

All indexes relate to costs for families established in the areas. They do not measure differences in costs associated with moving from one area to another, or costs for recent in-migrants.

Within each budget, the intercity indexes reflect not only differences among areas in price levels but also climatic or regional differences in the quantities and types of items required to provide the specified level of living, and differences in State and local taxes. Thus, they are comparative living costs indexes and not comparative price indexes.

The range in total budget costs is narrower at a lower level of living, and widens as the level rises. Costs were lowest in the small cities in the South for all three budgets. Metropolitan areas in the West were the most expensive for the lower budget, but this rank shifted to large cities in the Northeast for moderate and higher levels of living.

The annual total for the lower budget in spring 1967 amounted to \$5,224 in nonmetropolitan areas in the South and \$7,246 in Honolulu. With U.S. urban average costs equaling 100, this constitutes a range from 88 to 122, or 34 percentage points. Among mainland areas, costs of the lower budget were highest in San Francisco, averaging \$6,571 or 23 percentage points above the Southern regional average for small cities.

In the moderate and higher budgets, New York was the most expensive mainland area, averaging \$9,977 and \$14,868 at these levels, amounting to 24 and 30 percentage points respectively above the costs of comparable budgets in smaller places in the South.

APPENDIX D. REVISED EQUIVALENCE SCALE: FOR ESTIMATING INCOME AND BUDGET COSTS BY FAMILY TYPE¹

The attached equivalence scale has been prepared for use in estimating family consumption costs for families differing in size and composition from the specific 4-person city worker's family for which the City Worker's Family Budget was constructed. It rests on the assumption that families spending the same proportion of income on food have attained equal levels of living. In the new scale, information from the Bureau's Survey of Consumer Expenditures, 1960-61, replaced similar 1950 data used in developing the previous scale. Assumptions, calculations, and techniques were essentially the same for both scales. (See "Estimating Equivalent Incomes or Budget Costs by Family Type," *Monthly Labor Review*, November 1960, Reprint No. 2357.)

Special tabulations from reports of urban families cooperating in the 1960-61 survey were used in calculating the revised scale. These tabulations provided average income after taxes and average food expenditures per family for a three-way classification of families by: (1) family size, (2) family type, and (3) age of the family head.

In using the scale for estimating budget costs, or spendable income, for different types of families from the costs for the City Worker's Family Budget for a Moderate Living Standard, Autumn 1966, the scales should be applied to the budget costs of family consumption, i.e., costs for goods and services. Federal, State, and local income taxes, Social Security deductions, life insurance, etc., vary by family size, age, and level of income, and therefore must be calculated separately to estimate total budget costs.

The estimates of living costs for selected family types shown below were obtained by applying the equivalence scale values in the accompanying table to the cost of consumption for the 4-person family as reported in the City Worker's Family Budget.

Type of family	Size of family			
	2-persons	3-persons	4-persons	5-persons
Husband (age 35-54) and wife	\$4,397	--	--	--
Oldest child under 6 years	--	\$5,057	\$5,863	\$7,109
Oldest child 6-15 years	--	6,010	7,329 ²	8,502
Oldest child 16-17 years	--	6,083	8,282	9,381

¹U.S. Dept. of Labor, Bureau of Labor Statistics, Washington, D.C. Derived from BLS Survey of Consumer Expenditures in 1960-61. Derivation of the scale is described in *Revised Equivalence Scale: For Estimating Equivalent Incomes or Budget Costs by Family Type*, BLS Bulletin 1570-2.

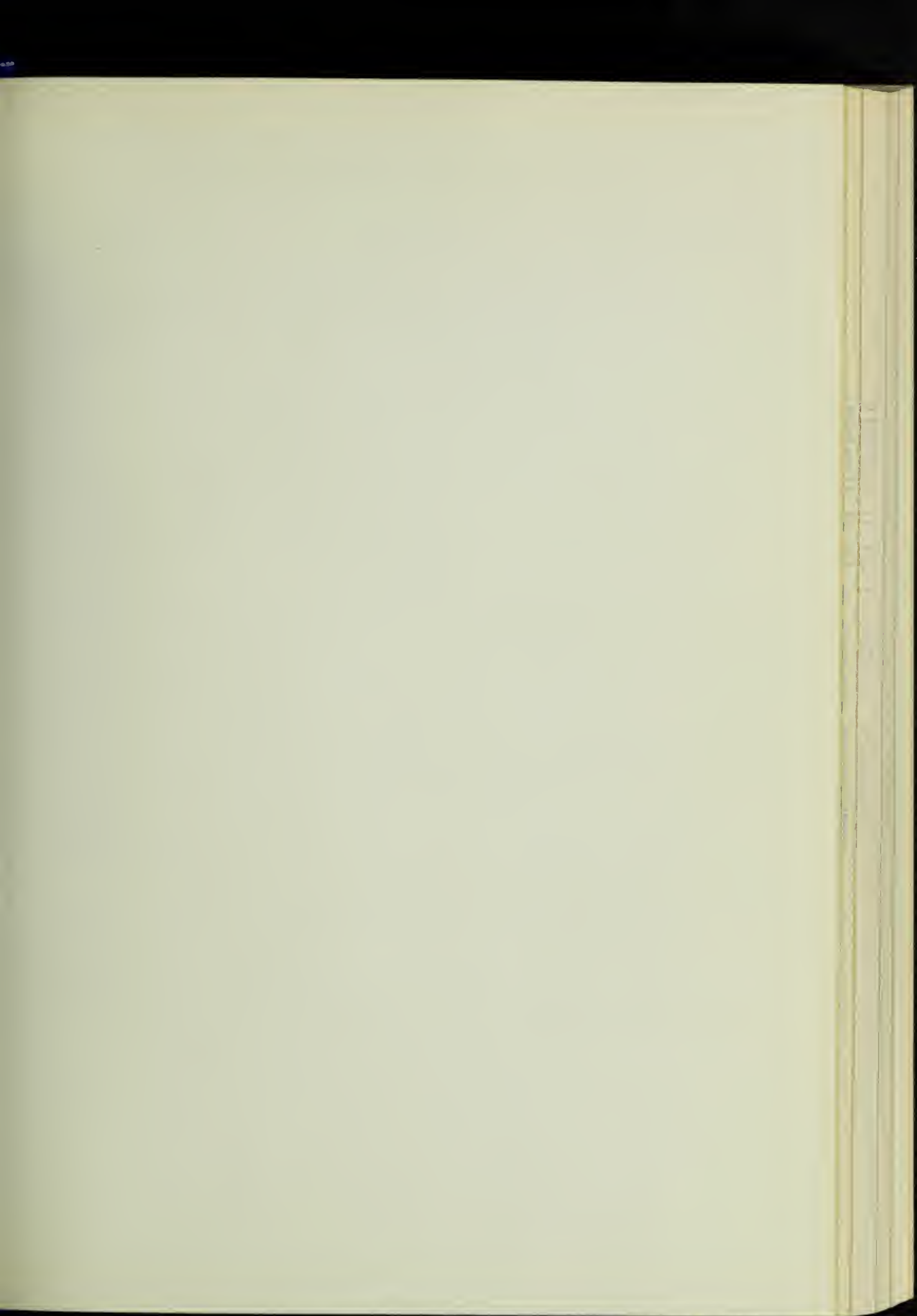
²Cost of goods and services for the 4-person family described in *City Worker's Family Budget for a Moderate Standard of Living, Autumn 1966*, BLS Bulletin No. 1570-1.

REVISED EQUIVALENCE SCALE³ FOR URBAN FAMILIES OF DIFFERENT SIZE, AGE, AND COMPOSITION

[4-person family—husband, age 35-54; wife; 2 children, older 6-15 = 100]

Size and type of family	Age of head			
	Under 35	35-54	55-64	65 or over
One person.	35	36	32	28
Two persons:				
Husband and wife	49	60	59	51
One parent and child	40	57	60	58
Three persons:				
Husband, wife, child under 6	62	69	--	--
Husband, wife, child 6-15	62	82	88	81
Husband, wife, child 16-17	--	83	88	--
Husband, wife, child 18 or over	--	82	85	77
One parent, 2 children	67	76	82	75
Four persons:				
Husband, wife, 2 children, (oldest under 6)	72	80	--	--
Husband, wife, 2 children, (oldest 6-15)	77	100	105	95
Husband, wife, 2 children, (oldest 16-17)	--	113	125	--
Husband, wife, 2 children, (oldest 18 or over)	--	96	110	89
One parent, 3 children	88	96	--	--
Five persons:				
Husband, wife, 3 children, (oldest under 6)	87	97	--	--
Husband, wife, 3 children, (oldest 6-15)	96	116	120	--
Husband, wife, 3 children, (oldest 16-17)	--	128	138	--
Husband, wife, 3 children, (oldest 18 or over)	--	119	124	--
One parent, 4 children	108	117	--	--
Six persons or more:				
Husband, wife, 4 children or more, (oldest under 6)	101	--	--	--
Husband, wife, 4 children or more, (oldest 6-15)	110	132	140	--
Husband, wife, 4 children or more, (oldest 16-17)	--	146	--	--
Husband, wife, 4 children or more, (oldest 18 or over)	--	149	--	--
One parent, 5 children or more	125	137	--	--

³ The scale values shown in this table are the percentages of the spendable income of the base family (4 persons—husband, age 35-54, wife, 2 children, older 6-15 years) required to provide the same level of living for urban families of different size, age, and composition.





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1971 WHITE HOUSE CONFERENCE ON AGING

NUTRITION

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E. Neige Todhunter, Ph.D.

ISSUES

THE TECHNICAL COMMITTEE ON NUTRITION
with the collaboration of the author

Donald M. Watkin, M.D., Chairman

White House Conference on Aging
Washington, D.C. 20201
March 1971

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March 1971

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Physical Education

FOREWORD

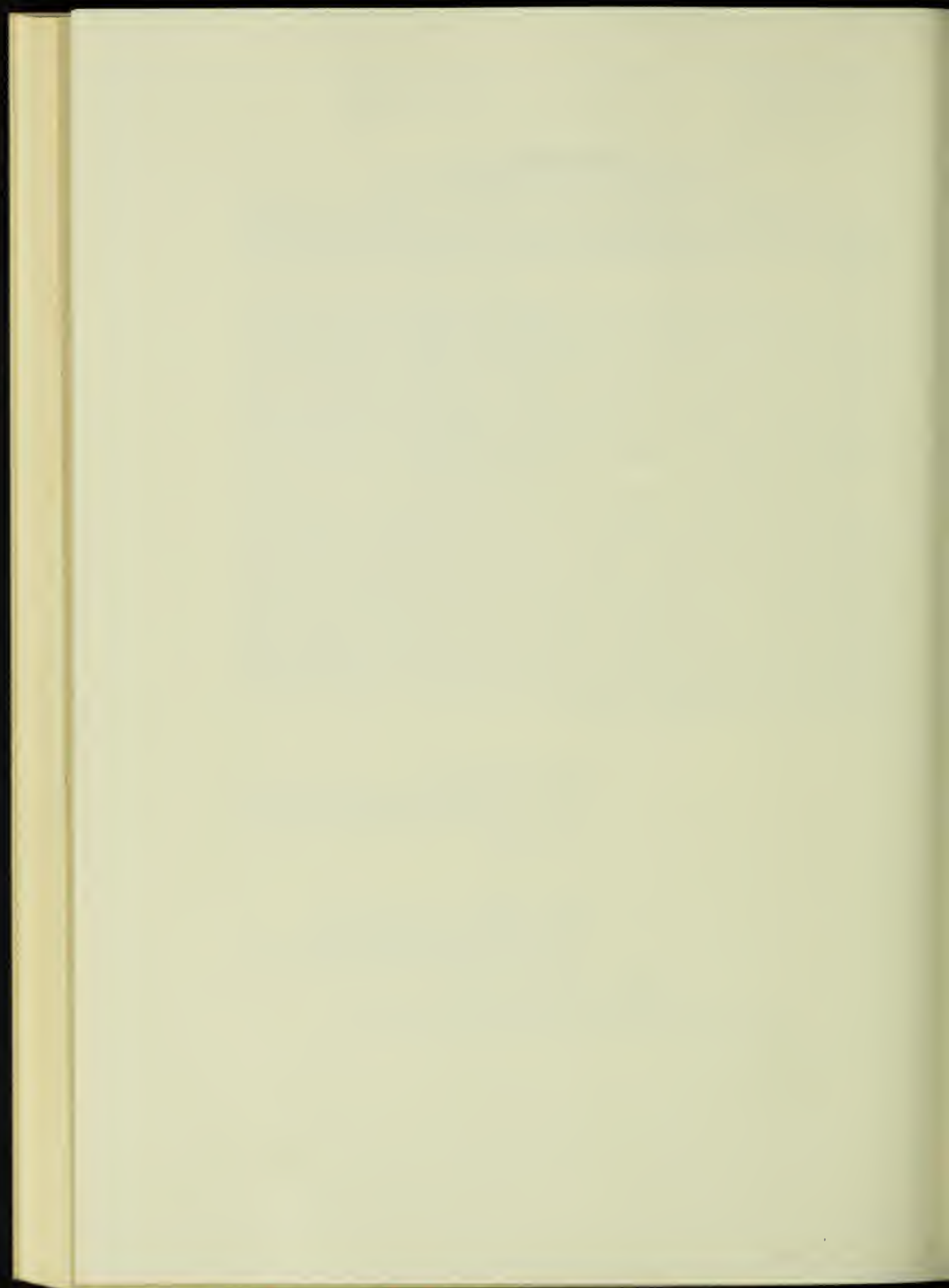
This paper on Nutrition provides information for the use of leaders concerned with the development of proposals and recommendations for national policy consideration and of delegates to the national White House Conference on Aging to be held in Washington, D.C., in November-December 1971.

The first four sections of the paper discuss: the need for nutrition education and knowledge so that the individual, from birth throughout life, may secure the kinds and amounts of nutrient needed; goals proposed by previous conferences and groups; information on the knowledge available relative to the nutrition needs of the elderly; and identifiable gaps involved in meeting such needs. These sections of the paper were prepared for the Conference by E. Neige Todhunter, Ph.D., Professor of Nutrition, Vanderbilt University, Nashville, Tennessee, with guidance from the Technical Committee on Nutrition.

The fifth section of the paper raises several issues to be resolved relevant to the nutrient needs of all people. The issues were formulated by the Technical Committee on Nutrition for consideration by participants in White House Conferences on Aging at all levels and by concerned national organizations. The purpose of the issues is to focus discussion on the development of recommendations looking toward the adoption of national policies aimed at meeting the nutrient needs of the older population. The proposals and recommendations developed in community and State White House Conferences and by national organizations will provide the grist for the use of the delegates to the National Conference in their effort to formulate a National Policy for Aging.

Arthur S. Flemming
Chairman, National Advisory Committee
for the 1971 White House Conference
on Aging

John B. Martin
Special Assistant to the President
for the Aging and Director of the
1971 White House Conference on Aging



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I. INTRODUCTION—THE NEED

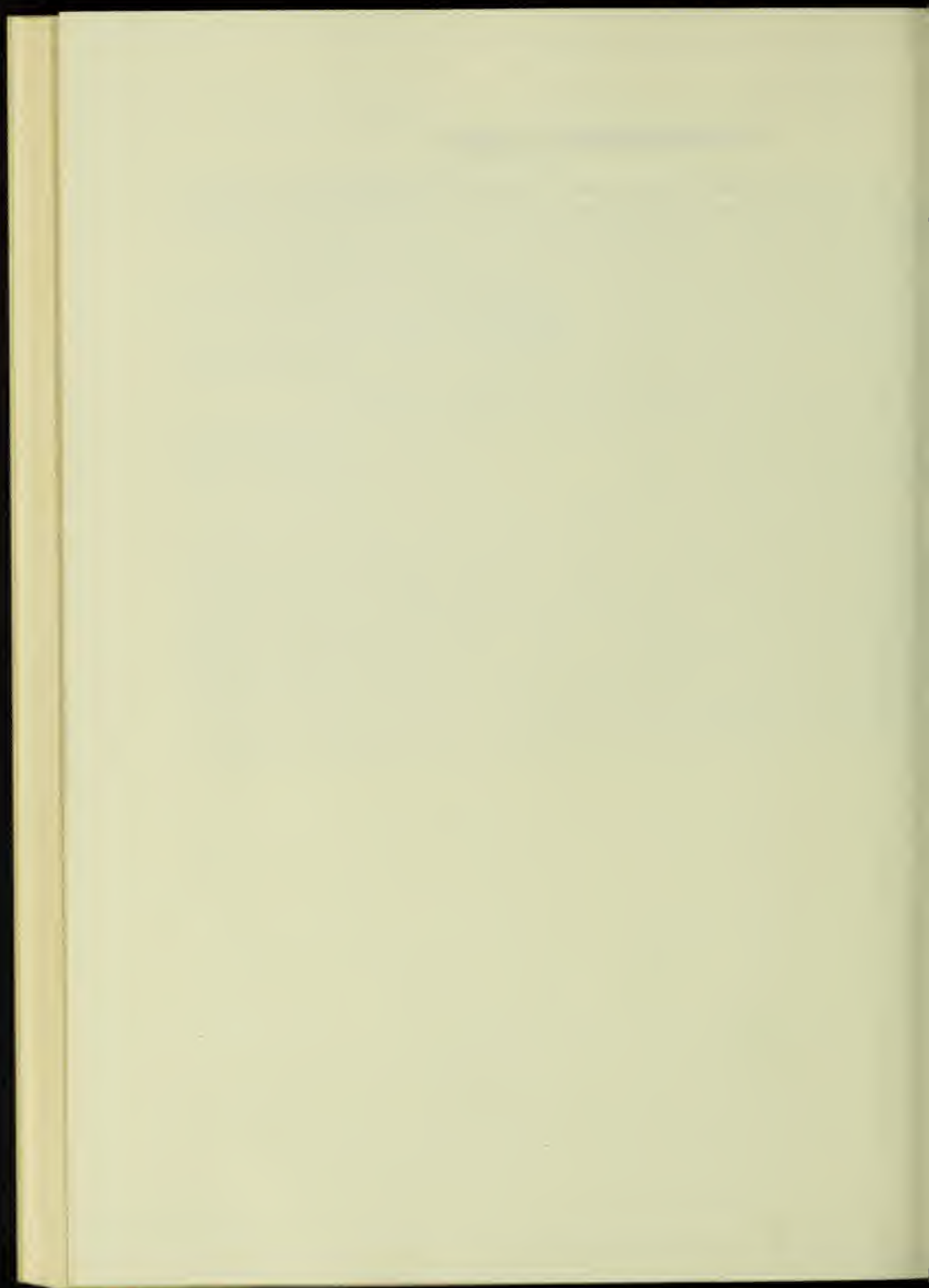
Food is basic to the existence of man. From the dawn of history hunger and famine have laid a heavy hand on human survival and progress. The development of agriculture, progress in transportation, communication, and the physical and life sciences have over the years greatly increased food production and distribution and helped to prevent famine.

In the 20th century a new science has developed based on the realization that food influences not only survival but is essential for growth, health, and vigor. Concurrently, it has been recognized that all foods are not alike—they differ markedly in their ability to meet different needs. This new science, the science of nutrition, is concerned with the specific nutrient needs of the human organism; how these needs are met by food; the kinds and amounts of nutrients required daily; and how the factors of age, sex, physical activity, physiological status, and complexities of living conditions influence these requirements.

The basic need of all mankind today is for food. However, it must be food which satisfies not only the physiological needs but also the complex social and psychological needs which emerge from the society in which man lives. The fulfillment of these needs contributes to man's self-respect and sense of dignity.

The science of nutrition has progressed far enough for one to justify and offer the following statements: that food is essential for life and that the nutritive value of food is a decisive factor in determining health and the quality of life from the time of conception until death; that a nutritionally adequate food supply for all people (irrespective of income and level of education) is a contributing factor to the maintenance of health and to the delay in the onset of some degenerative changes associated with the physiology of the aging processes; that chronological age and physiologic age differ widely in different individuals; that the provision of adequate nutrition in the early years can contribute to more productive and enjoyable life in later years; and therefore the goal should be a broad, positive approach to meeting the food and nutrition needs of the entire population of all ages.

While there is immediate concern and need to provide for those who are inadequately fed (the hungry and malnourished), the longer-range goal should not be ignored at this time.



II. LONG-RANGE GOALS

Nutrition investigations were authorized and funded by Congress in 1894 to be carried out in the Office of the Experiment Stations, U.S. Department of Agriculture (USDA),

to investigate and report upon the nutritive value of the various articles and commodities used for human food, with special suggestion of full, wholesome, and edible rations less wasteful and more economical than those in common use (Act of August 8, 1894, 28 Stat. 271).

Research in nutrition has been continuous since that time. The investigations are now carried out within the Agricultural Research Service of the Department of Agriculture. Some recent dietary studies are discussed in Section III, Knowledge Available, of this document.

In 1914 the Smith-Lever Extension Act (P.L. 63-95, 1914, 38 Stat. 372) provided for practical home economics instruction, which included food and nutrition, at the home and community level throughout the United States. These cooperative extension programs still continue. One of the newer aspects of such programs is discussed in Section III, Knowledge Available.

The establishment of the Children's Bureau in 1912 in the then Department of Commerce and Labor (the bureau is now in the Department of Health, Education, and Welfare) "marked the point where the Federal Government first took responsibility for promoting the welfare of individuals" (Oettinger, 1962). The Children's Bureau was concerned with all matters "pertaining to the welfare of children and child life among all classes of our people" (P.L. 62-116, 1912, 37 Stat. 79). Nutrition has been and continues to be a strong component of the bureau's program. During the years 1939-40, the bureau concentrated on building the Maternal and Child Health program (MCH) under the Social Security Act of 1935. The MCH program, now part of the Department of Health, Education, and Welfare (HEW), supports nutrition services in the various States.

During the 1950's and 1960's the Public Health Service of the Department of Health, Education, and Welfare gave leadership to development of nutrition services in chronic disease, aging, and nursing home programs. Positions for nutritionists in State health agencies were supported by categorical and general funds from the Public Health Service.

The National Nutrition Survey in 1968-69, conducted by Dr. Arnold E. Schaefer (1970) of the U.S. Department of Health, Education, and Welfare, is further evidence of Federal agency concern for human nutrition. (See Section III, Knowledge Available, for some results of this survey.) More specific concern for the health of the elderly has been demonstrated in the Medicare program and the Older Americans Act of 1965 (U.S. Department of Health, Education, and Welfare, 1970). During the signing of the 1965 act, President Johnson said that it "clearly affirms our Nation's high sense of responsibility toward the well being of older citizens." This act states as one of its objectives for older Americans "immediate benefit from proven research knowledge which can sustain and improve health and happiness." Nutrition is certainly a part of the achievement of this objective.

Implicit in these programs in the U.S. Department of Health, Education, and Welfare and the U.S. Department of Agriculture, as demonstrated by their activities although not specifically stated in these words, has been the long-range goal of providing nutritional services for children and mothers, for homes and families, and more recently for the aged, such services based on research and using educational methods.

The President's concern for nutrition of the elderly has been demonstrated by (1) the appointment in October 1969 of a Task Force on Problems of the Aging, and (2) the calling of the White House Conference on Food, Nutrition and Health in December 1969, with a panel appointed to study and make recommendations on the nutrition of the aging.

The Task Force on the Aging, in its report to the President (*President's Task Force on the Aging*, 1970) made one specific recommendation on nutrition programs for the elderly which reads as follows:

We recommend that the President direct the Administration on Aging and the Department of Agriculture to develop a program of technical assistance, and, when necessary, financial assistance, to local groups so that such groups can provide daily meals to ambulatory older persons in group settings and to shut-ins at home.

The White House Conference Panel on Aging made several recommendations which dealt with meal delivery; increased income; food stamp program revisions; and educational research, and development.

Over the years a number of foundations; private agencies; and professional organizations such as the American Dietetic Association, American Medical Association through its Council on Foods and Nutrition, American Academy of Pediatrics through its Committee on Nutrition, and the National Academy of Sciences—National Research Council through its Food and Nutrition Board, have had long-range programs devoted to the improvement of nutrition of all people.

In the long-term view, whatever nutrition information and services can do to improve the nutrition of infants or any other segment of the population will also benefit the aging.

Study of the various programs and recommendations described above, review of the scientific literature of nutrition, and knowledge and experience in the field of nutrition lead to the formulation of the following as long-term goals for the improvement of the nutrition of the elderly:¹

(1) Food for an adequate diet available to all the elderly. This goal involves solving problems of production and distribution of food (in rural and isolated areas as well as in metropolitan and suburban areas), accessibility of food, location and means of transportation to source of food (whether the aging live alone, with families or in groups, or are institutionalized), and economic ability to obtain the necessary food.

(2) Nutrition information for all people. Involved here are two major types of educational programs: (a) nutrition education of the medical profession and all allied health groups at various professional and subprofessional levels; (b) nonprofessional education directed to the elderly and to homes and families, and nutrition education in schools at all levels so that every individual may have practical working knowledge of selection and preparation of food and motivation to use such information in his own daily living.

(3) Continuing research in the science of nutrition and its application to the maintenance of health.

¹ These goals are the formulation of the author of this paper, but in essence summarize and rephrase what various agencies are actually doing and what various professional study groups have recommended.

III. KNOWLEDGE AVAILABLE

A. PHYSIOLOGICAL CHANGES WITH AGING

Aging is recognized as a process of change that continues from birth throughout life. Physiologic changes have been investigated extensively by Shock (1956, 1968, 1970) as well as other investigators of nutritional and biologic changes (Watkin, 1966b, 1968; Bertolini, 1969). Some physiologic characteristics remain unchanged over the life span. Examples of these are fasting blood glucose level, blood volume, pH level, red cell count, and osmotic pressure of the blood measured under basal or resting conditions—all of which indicate that the internal environment necessary for cell life is being maintained. Under conditions of stress, these blood values return to normal at a slower rate in the aged than in the young.

Other physiologic functions decrease with age. But the rate and extent of such decrements are an individual characteristic—they do not follow the same chronological age pattern in all individuals. In fact, chronological age and physiological age are not directly related, at least in the adult.

Nutrition undoubtedly influences the aging processes since it contributed directly to the environment and normal functioning of every cell. Whether the relation of nutrition to aging is a direct or indirect one or what the processes are is not fully understood at present. On the other hand, because the nutrition of an individual will be influenced by his physiologic age changes, these changes are briefly summarized here so as to provide a basis for discussion of nutritional needs.

Cells of many parts of the body are reduced in number through defective synthesis and subsequent failure to function, resulting in reduction in size and functional capacity of the organs. Collagen becomes less elastic and there is more fibrosis, contributing to a decline in functional capacity. Basal metabolic rate declines and therefore caloric requirement decreases. Physical activity usually diminishes, and muscular movements are slower.

Cardiac output, vital capacity, and maximum breathing capacity decrease, and pulse rate may be increased. Changes in body composition take place: total body water content diminishes, fat accumulation increases, calcium increases in the tissues while bone calcium may decrease (osteoporosis and osteomalacia), potassium content decreases, and many enzymes decrease.

Absorption from the digestive tract is possibly lowered, with reduction in number of absorbing cells, reduced intestinal blood flow, and reduced gastric acidity (Bender, 1968). Intestinal secretion of mucus decreases, with consequent tendency to constipation.

Loss of teeth influences chewing and therefore choice and acceptance of food; ill-fitting dentures may have a similar effect. Skin becomes dry with decreased elasticity and slower healing of surface wounds; hair becomes thin and white. Taste and sense of smell are impaired.

B. NUTRIENTS

The same nutrients, proteins, fats, carbohydrates, minerals, vitamins, and water are essential throughout life, but the amounts of each vary with age, sex, activity, and other factors, including individual variability. Recommendations for the daily allowances for those nutrients for which there is a reasonable body of reliable experimental data have been made by the Food and Nutrition Board, National Research Council (NRC) (1966, 1968) of the National Academy of Sciences. These recommended allowances "are designed to be adequate for

practically all of the population of the United States and they allow a margin of safety for individual variations. . . . They are intended to serve as goals for planning food supplies and guides for the interpretation of food consumption records of groups of people." Other countries have formulated similar types of nutrient intake standards. The Food and Agriculture Organization (FAO) and World Health Organization (WHO) of the United Nations have prepared statements for international use of recommended intakes of some of the nutrients.

The NRC-recommended dietary allowances (RDA) are given for only 16 nutrients. Although other nutrients are essential in the diet, data are insufficient at present to recommend allowances for these. Also, while the age categories used are from birth to 75 years and over, there is limited data available on the requirements of several age groups, including the mature and elderly.

The nutrients, their main functions, and available information regarding changes with aging are summarized below.

1. Caloric Requirements

Caloric adequacy is most readily recognized in the adult by weight maintenance. Actuarial statistics and other data indicate that the most favorable health expectation is associated with conditions where weight normally achieved by age 22 is maintained throughout life. Caloric requirements decline progressively after early adulthood because physical activity usually decreases, although many already sedentary individuals do not further decrease their activity as they grow older. There is also a small progressive decrease in basal metabolic rate with age. Unfortunately, decreased energy expenditure is not always followed by decreased calorie intake because food habits tend to remain unchanged. The result is the development of varying degrees of overweight and obesity; in fact, obesity is probably the most prevalent type of malnutrition in this country today. The advantages to health of rigorous calorie control are well documented (Watkin, 1966a).

2. Carbohydrates and Fats

Carbohydrates along with fats are the major sources of calories. The carbohydrates commonly used as food are starch and sugar. Over the past five decades (1910-1965) on a nationwide basis, there has been a decrease in carbohydrate consumption from 492 to 317 grams per person. There has been a change in the proportion of starch and sugar consumed in the same period, with a definite increase in sugar—from 31.7 percent to 51.2 percent of available carbohydrate—and a corresponding decrease in starch—from 68.3 percent to 48.8 percent of the carbohydrate—mainly because of lower consumption of foods such as flour, cereal products, and potatoes (Friend, 1967).

No quantitative recommendation has been made by the NRC for carbohydrates because fats and carbohydrates are interchangeable as dietary sources of energy and both are sparing of nitrogen. However, it must be remembered that on the same unit of weight basis fats supply 2½ times as many calories as do carbohydrates.

Fats are important in the diet for their palatability and satiety value, also as carriers of fat soluble vitamins and as sources of the essential fatty acid, arachidonic acid, or its precursor, linoleic acid. In the last two decades much attention has been focused on the kind and amount of fat in the diet and the proposed relation to the incidence of atherosclerosis and coronary heart disease. A direct causative relationship has not been established, but there is strong evidence of an association between these disorders and dietary cholesterol and saturated fat. Adequate discussion of the subject is beyond the scope of this paper. There are many pro and con arguments based on dietary and clinical investigations and other factors, particularly physical activity, that seem to be involved.

In this country, evidence has shown that high levels of cholesterol and triglycerides in the blood add significantly to the risk of coronary heart disease. Blood cholesterol levels are higher in men than women and increase in amount up to 40 years of age, then decrease after the sixth or seventh decade. Animal fats containing long-chain saturated fatty acids cause an increase in blood cholesterol, while vegetable fats (there are some exceptions) which have a high concentration of polyunsaturated fatty acids tend to decrease the cholesterol levels. Dietary cholesterol also raises blood levels of cholesterol. Lowering of blood cholesterol levels has been achieved in many cases by diets low in total fat, saturated fats, and cholesterol, and with an increased proportion of polyunsaturated fats (Alfin-Slater and Aftergood, 1968; Friedman, 1968). Until further evidence is available the desirable procedure is to follow the advice of the Food and Nutrition Board of the National Research Council, that is, using less fat and substituting some vegetable fats (polyunsaturated fats) for animal fats.

Proteins

Proteins are fundamental in the life processes at all ages and stages because they are part of the structure of all body tissues, both hard (bone and tooth matrix) and soft. Dietary proteins also provide the nitrogen and amino acids for synthesis of hormones, enzymes, plasma proteins, and hemoglobin of blood, and other nitrogen-containing substances. Proteins are composed of some 20 amino acids of which eight cannot be synthesized in the adult human body and must be supplied directly from food. These eight are called essential amino acids. The remaining amino acids can be synthesized in the body from dietary protein. Infants, however, require another amino acid, histidine, in addition to the eight required by the adult.

The nutritional significance of this difference between essential and other amino acids is that food proteins differ in the kind of protein they contain. Not all food proteins contain the essential amino acids—some lack one or more essential amino acids or contain insufficient amounts. The food proteins from animal sources (meat, fish, poultry, milk, eggs, cheese) contain the essential amino acids. Vegetable or plant proteins (cereal products, legumes, and vegetables) are deficient in one or more of the essential amino acids. But by careful mixtures of plant proteins the amino acid deficiency of one may be balanced by the composition of another.

Quantitative determinations of the amount of each essential amino acid have been made, but in normal dietary practices these are interpreted in terms of total protein intake. The National Research Council (1968) recommends that amino acid requirements may be met by the use of food proteins of high nutritional quality such as eggs, meat, and milk. The recommended protein intake (National Research Council, 1968) for adults after age 55 is 65 grams daily for men and 55 grams for women. When total caloric intake is adequate to meet energy expenditure (and protein does not have to be used for calories) this protein requirement may be met by a combination of plant and animal proteins. In practice, it is desirable that approximately one-third of the daily protein intake be from animal sources. This usually occurs in the average American diet, but for those with very limited food budgets or at low income levels the protein quality of the diet may suffer.

Minerals

A number of mineral elements are required in order to meet structural and functional needs of the body. Only those which may be lacking in the diet or which have some special function will be reviewed here.

1. Iron.

Iron is an essential nutrient, although the total amount of iron in the body is small: approximately 3.5 grams in the average healthy male adult and 2.1 grams in the adult female. About 70 percent of this iron is functional—it is in the hemoglobin of the red blood cells, with

small amounts in the blood plasma, the myoglobin of muscles, and in enzymes. The remainder is stored in tissues of liver and spleen and in the bone marrow. A small amount of iron is excreted daily: 1.0 mg. by men, 1.5 mg. in menstruating females, and 2.5 mg. by pregnant women (Finch, 1968), and the constancy of the amount in the body is maintained by limited absorption. Intestinal absorption of iron increases (if dietary intakes are adequate) when there is blood loss or any other factor causing iron loss from the body. The complexities of iron absorption and how it is controlled are not yet fully understood. Maintenance of normal hemoglobin levels—12 to 15 grams per 100 ml. blood—is essential for normal body functioning. Levels of hemoglobin of less than 11 grams per 100 ml. blood are indicative of iron-deficiency anemia. This is one of the most common nutritional deficiencies in Western countries (Bothwell and Charlton, 1970) and is common in the United States. Iron-deficiency anemia occurs most frequently in infants and during pregnancy. It is comparatively rare among men. The National Research Council recommends a daily dietary intake of 10 mg. for males and 18 mg. for adult females up to age 55, and 10 mg. for those over 55.

The average American mixed diet supplies up to 6 mg. of iron per 1,000 calories of food. Therefore, an adult male can readily obtain 10 mg. daily on a well-selected diet. But for the female of 35 to 55 years whose caloric intake should be around 1,850 calories, the difficulty of meeting the recommended allowance must be recognized.

Iron in food is not readily absorbed because it is present in organic complexes and must be freed from its organic attachments by the digestive processes within the gastrointestinal tract, and be available in a soluble form for absorption. Foods differ markedly in the availability and therefore the absorption of their iron. In general, the iron from animal food sources is better absorbed than that in vegetables. There are exceptions: iron of eggs is poorly absorbed, while that of soybeans is well absorbed (Charlton and Bothwell, 1970). Orange juice, because of its vitamin C content, increases the absorption of iron (Conrad and Schade, 1968), while phosphates and oxalates form insoluble iron salts and depress the absorption (Crosby, 1969).

Because of the incidence of iron-deficiency anemia and the difficulty of attaining adequate intakes of iron from an ordinary mixed diet, recommendations have been made to fortify staple foods with iron. This should be done with care since excessive iron intakes could be harmful. There are limits to the amount which can be added to foods such as flour because the storing and baking qualities are affected; also the form of iron used must be one that is readily absorbed.

The whole question of iron requirements and how they are met by diet is a complex one requiring further research. The recommended allowance (National Research Council, 1968) is lower after middle age, 10 mg., but this amount may not be achieved by the elderly who are living on low-cost diets with little animal protein.

4.2. Calcium.

Calcium is an essential dietary constituent necessary for bone mineralization and therefore for skeletal growth and maintenance. Calcium also has regulatory functions concerned with neuromuscular irritability, blood clotting, muscle contractibility, cell and capillary membrane permeability, and cardiac function. The RDA for calcium is 800 mg. for adult males and females (National Research Council, 1968). Dietary studies (discussed below) have reported low calcium intakes as frequent. Because of the significant functions of calcium and the high incidence of the bone disorder, osteoporosis, further discussion of this nutrient is necessary.

Calcium is absorbed from the intestine. Efficiency of absorption is high in infants during the first year of life, then decreases in childhood and in the adult (Harrison, 1959). The decrease in absorptive capacity, determined from balance experiments in animals and humans, has been confirmed with radioactive calcium (Bronner and Harris, 1956). Absorption is decreased by oxalates, phytate, phosphate, and high intakes of fat. Protein—particularly the

amino acids, lysine and arginine—increases calcium absorption in rats (Wasserman *et al.*, 1956, 1957). Vitamin D increases absorption, particularly when low concentrations of calcium are present in the intestinal tract because of low dietary intake (Harrison, 1959). Need, or the degree to which calcium can be deposited in bone, also affects absorption (Harrison, 1959). Retention of calcium is adversely affected by emotions (Ohlson and Stearns, 1959; Malm, 1958) and by inactivity or immobility. Some individuals can remain in calcium balance at low levels of intake (Hegsted, Moscosco, and Collazos, 1952). This adaptation ability has been well demonstrated, but there is no evidence that adaptation to low intakes is desirable. Many individuals have difficulty in adapting and some are unable to do so at all; these are the people who may be most susceptible to disorders of bone mineralization, particularly osteoporosis.

The possibility that high intakes of calcium may be detrimental has been considered. But there is no firm evidence that high intakes are harmful nor that they lead directly to deposition of calcium in the soft tissues (Harris, 1959).

Since nutrition is recognized as one factor which may be significant in the development and correction of osteoporosis, it must be considered briefly in this discussion. Literature on this complex and unresolved disease-condition is voluminous, and there are varying theories as to the cause and the relation of dietary calcium (Lutwak and Whedon, 1962; Nordin, 1960; Jowsey, 1965; Walker, 1965).

A minimal estimate was made of over four million cases of severe osteoporosis in the United States in 1962. In this disease there is a reduction in the amount of bone, accompanied by fractures of the vertebrae, neck, and of the femur, with little or no trauma. The disease is four times as frequent in women as in men and begins to appear in middle age. But it is not readily identified in the early stages of demineralization because it is not apparent by X-ray examination until from 25 to 50 percent of the calcium is lost from the bone (Lutwak and Whedon, 1962). There is evidence that long-continued negative balances of calcium—that is to say, intakes below the individual's requirement—may lead to osteoporosis (Nordin, 1960). Osteoporotics show increased bone resorption (Nordin, 1960; Jowsey, 1960) and a high retention of calcium when placed on high-calcium diets. While there is no agreement among research workers, there is good support for the theory that liberal calcium intakes of 1,000 mg. or more are beneficial for the elderly.

Fluoride may also have a beneficial effect in osteoporosis, as discussed in the section on fluoride below.

Fluorine.

Fluorine, an element found in small amounts in soil and water and thus in plant and animal tissues, is therefore a naturally occurring constituent of the normal diet. It is deposited mainly in teeth and bones of humans. The contribution of fluoride to the strengthening of tooth enamel in children during the first 16 to 18 years of life, and especially in early childhood, and thus to lower incidence of dental caries is well verified in experimental studies in various population groups. For this reason the Food and Nutrition Board, National Research Council (1968) considers fluorine to be an essential nutrient. Many nutrients and substances occurring naturally in foods are harmful if consumed in excessive amounts. Recommended levels of fluoride in drinking water are 1 p.p.m. in temperate zones. However, drinking water which contributes an average of not more than 3.0 to 4.0 mg. fluoride daily does not bring about cumulative toxic fluorosis (McLure, 1970).

Experimental studies have shown that fluoride in the diet and drinking water enters the dental structure and becomes part of bone apatite giving greater strength to the crystalline structure. Knowledge of this process has aroused interest in the possible benefits of fluoride in preventing osteoporotic changes in the bones of the aged. Careful studies have been made (Nordin *et al.*, 1966) comparing X-ray pictures of the bones of more than 1,000 subjects, aged 45 years, who had spent most of their lives in North Dakota. Two-thirds of the group lived in an area where there was low fluoride in the drinking water and the remainder in an

area with 4 to 5.8 p.p.m. fluoride in the water. Evidence of osteoporosis, reduced bone density, and collapsed vertebrae was substantially higher in the low-fluoride area, especially in women. Much further research will be necessary before any conclusions can be drawn as to the benefits of fluoridated water in prevention of bone disorders in the elderly. These studies, however, provide a significant beginning.

4.4. Iodine.

Iodine is firmly established as an essential nutrient for normal functioning of the thyroid gland and the prevention of endemic goiter. Since iodine has been leached from the soil and washed away in many areas—particularly in mountainous regions and the Great Lakes area—the amount of iodine available from food and drinking water varies widely, in some cases its presence being almost negligible. Recommendations for the daily intakes of iodine (National Research Council, 1968) are 100 micrograms for men 55 years and over, and 80 micrograms for women of the same age. Because food and water alone cannot be relied on to provide needed amounts of iodine, the use of iodized salt is recommended for all families and all age groups. The current permitted level of salt iodization in the United States is 0.5 to 1.0 part in 10,000; this is a safe and beneficial level. The use of iodized salt is optional in the United States, although mandatory in many countries. The Food and Nutrition Board (National Research Council, 1968) has recommended that there be Federal legislation to make salt iodization mandatory in the United States.

4.5. Magnesium.

Magnesium is an essential nutrient present in soft tissues and bones. Disorders arising from magnesium deficiency have occurred in man (Vallee *et al.*, 1960; Tambascia, 1962). A well-chosen American diet is estimated to contain 120 mg./1,000 kcal of magnesium and would meet the RDA of 300 mg. for women and 350 mg. for men if the calorie intake is around 2,500 calories. The mature and elderly, especially women, have a much lower intake of calories than this and therefore could be receiving inadequate magnesium intakes.

4.6. Sodium.

Sodium is present in the fluids surrounding the cells and aids in the maintenance of body-fluid volume and osmotic equilibrium. Sodium occurs in many foods and is added as sodium chloride (table salt) in food processing and preparation. Deficiency is not common in healthy individuals, but intake may need to be controlled in some pathologic conditions.

4.7. Potassium.

Potassium is present within the body cells where it is concerned with enzyme functions. It is widely distributed in fluids, and intake is usually adequate in normal individuals. Disturbance of potassium metabolism may occur in some body disorders necessitating careful control of the intake.

4.8. Other Minerals.

A number of other mineral elements have been identified as essential body components, but are present in small amounts, and therefore sometimes referred to as trace elements or micronutrients. These elements function as part of the normal human enzyme systems. Included in this group are chromium, cobalt, manganese, molybdenum, selenium, and zinc. A mixed diet containing animal protein, green leafy vegetables, fruits, and whole grains

uld be expected to supply adequate amounts of these microelements (National Research Council, 1968).

Vitamins

The vitamins, extensively studied since 1912, have each been identified as essential dietary constituents, based on the finding that physiological changes could be clearly demonstrated in the absence of each vitamin. The diseases scurvy, rickets, pellagra, and xerophthalmia have long been known. But only in the last half-century were specific vitamins discovered as the preventive and curative factors for these diseases. The disease-related aspect of vitamins still tends to be associated in the minds of many who are responsible for planning the good nutrition of the population. Emphasis needs to be placed as well on the functions of each of the vitamins in relation to the normal processes of the body. Absence of characteristic symptoms of deficiency is not necessarily an indication that groups are receiving adequate amounts of each vitamin for the maintenance of health throughout life. The contribution of the vitamins, as for example, vitamin E (as discussed below), to the possible delay of aging changes within the cells should not be overlooked. The same considerations hold true for other nutrients.

Vitamin A.

Although this was the first vitamin to be specifically identified, its functions in human nutrition are not completely understood. It is concerned with visual processes and in the maintenance of the epithelial membranes. A prime deficiency symptom is xerophthalmia, which is a major cause of blindness in some parts of the world. Vitamin A is widely distributed in foods; it is present as the provitamin, betacarotene, in green and yellow fruits and vegetables and as the preformed vitamin in meat, eggs, and dairy products, fats, and fish oils. No data are available as to the specific requirements for the mature and elderly adults. The recommended dietary allowance is 5,000 I.U. daily. Dietary fat is necessary for the absorption of vitamin A. Decrease of bile secretion, use of laxatives, antibiotics, and some drugs decrease absorption of vitamin A.

Vitamin D.

Vitamin D is essential for the absorption and utilization of calcium for bone mineralization and prevention of rickets. The recommended level of intake is 400 I.U. daily (National Research Council, 1968). Major emphasis is placed on this vitamin in infancy and childhood, but it is essential throughout life. Adequate intakes of vitamin D, therefore, are essential for the elderly. There is evidence, too, that vitamin D is involved in the absorption and utilization of calcium in osteoporosis (Nicolaysen, 1960). Special attention should be directed to this intake for those aged individuals who are homebound or hospitalized and have no opportunity to be exposed to sunlight and thus benefit from the ultraviolet radiation effect on the skin in producing vitamin D.

Vitamin E.

Vitamin E is the generic term for alpha-tocopherol and for those tocol derivatives which show similar biological activity. It has been demonstrated that lack of vitamin E causes a variety of disorders in various species of animals and birds. Its function in man is less clearly defined, but it is recognized as an essential nutrient. It has been shown (Horwitt, 1962) that vitamin E deficiency can occur in physically-normal adult men. Red blood cells in infants and adults are more susceptible to hemolysis when vitamin E is lacking in the diet.

The daily requirement for vitamin E is dependent in part on the amount of polyunsaturated fats in the diet. Polyunsaturated fatty acids undergo peroxidation within the body cells. This process involves a reaction between oxygen and fatty acids to form free radical intermediates which move about rapidly with much force striking other molecules and causing damage to the cell. Tappel (1968, 1970) has developed the hypothesis that polyunsaturated lipid peroxidation is one of the major causes of aging within the cells. Vitamin E is an antioxidant and inhibits the peroxidation reactions and therefore, according to Tappel, may be an important factor in slowing the aging process. (Vitamin C, the trace element selenium, and sulfur-containing amino acids also act as biological antioxidants.)

Polyunsaturated fats are necessary in the human diet to supply essential fatty acids. In the average American diet, about 40 percent of the calories are from fat, and 17 percent of the total fat intake is in the form of polyunsaturated fats (Tappel, 1968). The dietary intake of vitamin E should be increased when the polyunsaturated fat intake increases. A specific ratio of vitamin E (E) to polyunsaturated fatty acids (PUFA) has been proposed by Harris and Embree (1963) as 14.9 mg. E to 24.2 grams PUFA, which gives a reference ratio of 0.6. A ratio below this figure would have an adverse effect on vitamin E nutriture.

Food sources of vitamin E vary (Bunnell *et al.*, 1965). The most important sources are vegetable oils, and foods containing significant amounts of vegetable oils or shortening. However, soybean oil is not high in vitamin E. The amount of vitamin E present depends on processing methods and storage. Ordinary cooking does not cause appreciable losses, but stored frozen foods lose vitamin E. Fruits and vegetables have small amounts of vitamin E, as do meat, fish, and poultry contain low to moderate amounts. Calculation of the alpha-tocopherol content of a series of typical breakfast, lunch, and dinner menus indicates a daily intake of 2.6 mg. to 15.4 mg. of this vitamin with an overall average of 7.4 mg. This is about half of previous estimates and indicates that diets of some of the population could be inadequate in vitamin E (Bunnell *et al.*, 1965).

Much more research is necessary on all aspects of the dietary needs and functions of vitamin E, particularly in the mature and aging adult. Vitamin E deficiency symptoms have not been observed in the general population. However, present data indicate the possibility of deficiency in vitamin E among elderly adults and the possible significance of this vitamin in the aging process.

5.4. Vitamin K.

Vitamin K is an essential nutrient concerned in the process of blood clotting. It is apparently well-supplied in the average diet. There are insufficient data concerning quantitative requirements for humans, and no recommended dietary allowance has been made.

5.5. Ascorbic Acid.

Ascorbic acid or vitamin C is a water-soluble vitamin involved in a number of oxidation and hydroxylation reactions in the body. Deficiency produces scurvy, characterized by fragility and permeability of capillary walls, swollen spongy gums, changes in dentine structure of teeth, and absorption of alveolar bone of the maxilla so that teeth loosen and fall out. Scurvy is rare in the United States, although cases of infantile scurvy occur and may also be found in adults, especially men living alone, or the chronically ill who have remained in bed for months on diets devoid of vitamin C.

Significant sources of vitamin C are fruits, vegetables, and liver. Citrus fruits, berries, green and leafy vegetables, tomatoes are reliable sources. This vitamin is readily oxidized and destroyed by heat, and lost in water used in cooking vegetables. Therefore, fruit and vegetable juices, green salads, and vegetables that are not overcooked are recommended daily sources of the vitamin. The current intake recommended by the National Research Council is 55 mg.

adult woman to 60 mg. for a man. There is no evidence of increased requirement with age, but there are data from dietary studies showing that the elderly frequently have inadequate intakes.

Thiamine.

Thiamine, also known as vitamin B₁, functions as part of enzyme systems responsible for the metabolism of carbohydrate. Beriberi occurs where there is deficiency of thiamine. Beriberi is a disease associated with neuromuscular and cardiac function, and is still common in undernourished countries but not in the United States. Mild deficiencies or dietary intakes below individual requirements cause loss of appetite, nausea, and muscle tenderness in the legs. Dietary studies frequently show inadequacies of this vitamin. It is required by all age groups, and there is some evidence that older people may be less efficient in their absorption and utilization of this vitamin. National Research Council recommends a daily intake of 1.3 mg. for men over 55 years and 1.0 mg. for women over 55. Food sources are meat, particularly pork, whole grain cereals or enriched bread, and rice and vegetables. The vitamin is water-soluble and heat-labile and may be destroyed in food preparation.

Riboflavin.

Another of the B-vitamin group, riboflavin, also functions in the enzyme systems of the body. Dietary deficiency results in clinical symptoms. A daily intake of this vitamin is essential for the health of all ages, and the RDA is 1.7 mg. and 1.5 mg. for adult men and women, respectively. Milk and vegetables are the better sources of this vitamin; inadequate intakes are frequently observed in dietary studies.

Niacin.

Niacin is the generic term for nicotinic acid and nicotinamide and was discovered through investigation into the cause and cure of pellagra, a disease which is characterized by changes in the tongue and skin. Early signs of niacin deficiency are lassitude, loss of appetite, and digestive disturbances, and emotional changes such as anxiety, irritability, and depression. In severe deficiency there may be hallucinations and marked mental disturbances. Tryptophan, an essential amino acid, is converted to nicotinic acid in the metabolic processes (60 mg. tryptophan equivalent to 1 mg. niacin), and therefore the dietary requirement (estimated at 1.7 mg. and 1.5 mg. for adult men and women, respectively) is influenced by the kind and amount of dietary protein. Diets adequate in protein and niacin may aid in avoidance of unusual states observed in some elderly persons.

Vitamin B₆.

This is the term for a group of naturally occurring compounds: pyridoxine, pyridoxal, and pyridoxamine. Most of the vitamin B₆ activity of the average American diet comes from pyridoxine which is more resistant to food-processing and storage. This vitamin is essential to a number of enzyme actions, including conversion of tryptophan to niacin. In deficiency states many tissue changes are observed. Vitamin B₆ is widely available in foods. Deficiency symptoms are infrequent under natural conditions in humans, although there are reports that on poor diets the intakes may be low. There is evidence (Hamfelt, 1964) that the metabolism of vitamin B₆ is altered in older age groups, but the consequences have not yet been identified.

5.10. Vitamin B₁₂.

Vitamin B₁₂ is essential for the normal functioning of all cells, but especially for those of the bone marrow, the nervous system, and the gastrointestinal tract. This vitamin is concerned with the metabolism of protein, fat, and carbohydrate, and also of the vitamin folacin, and the prevention of megaloblastic anemias. Its absorption is dependent on the presence of a gastric mucoprotein, the intrinsic factor. Deficiency symptoms in this country are believed to be caused by lack of the intrinsic factor rather than lack of vitamin B₁₂ (Herbert, 1970). This vitamin is found mainly in foods of animal origin with very little present in plant foods. Those living exclusively on a vegetarian diet have shown deficiency symptoms (Smith, 1965).

5.11. Folacin.

This is the generic term for folic acid and related compounds which exhibit qualitatively the biological activity of folic acid (monopteroylglutamic acid). Deficiency of this vitamin has been reported as one of the common vitamin deficiencies in man (Herbert, 1967).

Folacin deficiency results in megaloblastic anemia, glossitis, and diarrhea. Megaloblastic anemia is common throughout the world, particularly in underdeveloped regions. There is evidence as well (Girdwood, 1969) that it is a genuine problem in the United States and Great Britain, especially among the poor, alcoholics, and those suffering from cirrhosis. Megaloblastic anemias may be caused by a deficiency of folacin, or of vitamin B₁₂, or both, and are morphologically indistinguishable. But there is no reliable evidence that the neuropathologic lesions common in vitamin B₁₂ deficiency occur in folacin deficiency (Herbert, 1965).

A folacin deficiency may be caused by inadequate dietary intake, impaired absorption and utilization, increased excretion, or increased demand by tissues of the body. Deficiency occurs more commonly in those over 65 years of age.

Green leafy vegetables and liver are rich sources of folacin, but losses in cooking occur due to water solubility and heat effect.

5.12. Pantothenic Acid.

This acid functions as a coenzyme concerned with release of energy in the metabolism of carbohydrates and fats. It is widely distributed in foods, and diets adequate in the other B-vitamins will supply this vitamin.

6. Water

Water comprises between one-half to three-fourths the body weight and is essential for the normal function of all body processes. There is a continuous loss of body water by way of the intestine, kidneys, lungs, and skin, and this loss needs to be balanced by a daily intake obtained from food, beverages, and drinking water.

C. NUTRITIONAL STATUS AND DIETARY SURVEYS

Dietary studies provide useful information on the kind and amount of food consumed and therefore they show food habits, eating patterns, and the frequency of use of specific foods. By calculation of nutrient content from food tables, such studies are indicative of dietary adequacy when compared with some selected standard of reference. As indicators of deficiency conditions and malnutrition, dietary studies should be interpreted with extreme care. Their value depends on the method used and awareness of the many influencing factors (Scrimshaw, 1962). Weighed food intakes provide reliable data, but such measurements are time consuming and are more often used in studies of a single individual. For group studies the

methods commonly used are: (1) a daily record kept by each person of all food eaten over a seven-day period, or some other selected period of days; (2) questionnaire form with questions to be answered by the participant; (3) interview by a trained interviewer or qualified nutritionist; (4) 24-hour recall, where each participant gives a detailed, quantitative listing of foods and beverages consumed in the preceding 24-hour period.

Some of the factors which influence the validity of the results from dietary studies are:

- (1) The training and skill of the interviewer, the type of questions asked, and the cross checks used.
- (2) The cooperation, willingness to tell or record everything consumed, level of education and understanding of the instructions given, ability to estimate size of serving of food, and memory of the subjects studied. Older individuals have less ready recall than younger subjects, and women usually have better recall than men (Campbell and Dodds, 1967). Those who volunteer for such studies may be the more alert and vigorous of the group (Brin *et al.*, 1965) and therefore may provide a bias to the findings.
- (3) The number of individuals studied and whether that number is adequate to provide valid data.
- (4) Whether the diet record is representative of year-round food selection.
- (5) Food composition tables used for calculation of nutrients are average values only: food composition varies with season, where produced, processing, and preparation methods, and with analytical methods used.
- (6) The interpretation placed on the data obtained.

In this country, the recommended dietary allowances (RDA) of the Food and Nutrition Board of the National Research Council (1968) are most frequently used as a standard of adequacy. The National Research Council allowances are liberal:

excepting calories, the allowances are designed to afford a margin sufficiently above average physiological requirements to cover variations among practically all individuals in the general population. . . . Individuals whose diets do not meet the RDA are not necessarily suffering from malnutrition, and diets should not be judged as 'poor' on an arbitrary figure based on comparison with the RDA (National Research Council, 1968).

With the above points in mind, dietary studies can be a source of valuable information. Dietary studies made between 1957 and 1967 have been summarized by Kelsay (1969) and by Davis *et al.* (1969). Comparatively few studies have been made of the older age group, and several are described here to provide information on current diets of the elderly. Nationwide studies of food consumption and dietary levels of population groups have been conducted at intervals by the U.S. Department of Agriculture since 1936. The most recent of these surveys was made in 1965 on a representative sample of 14,500 men, women, and children in the four census regions and in metropolitan as well as rural farm and nonfarm areas. Part of the study was a 24-hour recall of all food consumed, with nutrient content calculated and compared with the RDA (U.S. Department of Agriculture, 1969). The average nutrient value of the food per person per day at all income levels was adequate for men aged 55 to 64 years. But with increasing age, the diets were low in calcium, and men over 75 years had diets somewhat low in vitamin A, thiamine, riboflavin, and ascorbic acid, as well as low in calcium. However, men were often more than met the recommended allowances than women. Women 55 to 64 years had diets slightly below RDA in thiamine and riboflavin, and 30 percent were low in calcium. In the age

group 65 to 74 years, women's diets were below the RDA in calcium, thiamine, riboflavin, and those 75 years and over were also low in iron and vitamin A. When compared at different income levels the average nutrient intakes were lower for most nutrients, particularly vitamin A and vitamin C, in the group with incomes below \$3,000 for both men and women. Regional differences in the mean nutrient values for the older age groups were not observed; intakes were comparable for the South and the North region, with the exception of slightly lower intakes of vitamin C for women in the South.

Other dietary studies of the elderly have been on a more localized basis. In Rochester, New York, a selected group of beneficiaries of Old-Age, Survivors, and Disability Insurance (OASDI) was studied by the food-recall method. The participants were 65 years or older living alone, or with one other person (husband and wife, brother and sister, or two women) over 55 years; 283 households were studied. The household incomes were relatively low, and while a few had gone to college, three-fourths had only an elementary school education (LeBovit and Baker, 1965). Since the National Research Council allowances are liberal, comparisons were made on the basis of how many obtained two-thirds of those allowances. Nearly three-fourths (72 percent) of the households had diets that met this level for all nutrients, but a considerable number had diets low in calcium and vitamin C. Diets low in one nutrient were usually low in several nutrients. The factors most closely related to poor diets were low expenditures for food, lack of appetite, and age.

In a highly selected group of middle-class and well-to-do individuals (42 men and 62 women) living in Boston with ages ranging from 51 to 97 years (two-thirds of the group were 70 years or over), dietary information from interview and 7-day records showed highly variable intakes of proteins, vitamins, and minerals, with some intakes quite low, especially thiamine, iron, and calcium (Davidson *et al.*, 1962).

Other dietary studies indicate nutrients below recommended levels were iron, calcium, and vitamin A for women living alone or with others (Fry *et al.*, 1963). For aged nursing home patients calcium and vitamin C were below RDA for almost half the group (Hankin and Antomattei, 1960). Others (Skillman *et al.*, 1960) have also reported low vitamin C intakes in hospitalized elderly individuals.

Changes in dietary intakes with age were studied by McGandy *et al.*, (1963) for 252 highly educated, successful professional and businessmen, aged 20-99 years, in the Baltimore-Washington area. Intakes of all nutrients were adequate by National Research Council standards and were higher than for other groups of comparable ages. Calorie intake decreased with age; calories from fat decreased and there were decreases, but not statistically significant, in iron, thiamine and riboflavin. Intakes of calcium, vitamin A, and vitamin C remained high with increasing age.

Nutrient intake data obtained in the current National Nutrition Survey being conducted by the Public Health Service, U.S. Department of Health, Education, and Welfare, is presently available for the elderly in Louisiana and Texas (Schaefer, 1970). The sample in these two States was drawn from the lower quartile of income areas. Standards of reference for adequacy were different from the National Research Council except for protein and iron; for the nutrients calcium, thiamine, riboflavin, vitamin A, and vitamin C standards were in the most cases little more than half of the RDA. These standards must be kept in mind with regard to the following reported data obtained from 24-hour-recall of food eaten by individuals over 60 years of age. In Texas, approximately one-third of the elderly received less than 70 percent of the reference standard for adequacy for protein, thiamine, iron, vitamin A, calcium, and vitamin C. In Louisiana, almost half (45 percent) of the elderly group consumed less than 70 percent of the reference standard of adequacy for protein, iron, thiamine, and vitamin C (calcium data were not reported for this group).

Summarizing the findings of recent dietary studies, one finds decreasing food intake with age, diets frequently low in minerals and vitamins, and better diets found with higher income and education. Low income, poor housing, and attendant interrelated factors

tribute to inadequacies in the diets reported in the National Nutrition Survey (Schaefer, 1970).

Use of Vitamin and Mineral Supplements by the Elderly

Certain of the dietary studies described above obtained some information on the use of vitamin and mineral supplements. In the U.S. Department of Agriculture nationwide study (1969), supplements were found to be used by adults, mostly by those over 75 years; in the 18 to 54 age groups more women than men used supplements. Among the participants in the Rochester, New York, study (LeBovitz and Baker, 1965), over one-third reported using vitamin preparations; half of those taking vitamins had already met the recommended intakes from their diets. Of those whose diets failed to meet the recommended levels in any nutrient and who were taking supplements, only one-fourth were using preparations that covered all of their dietary shortages; another half were using preparations that contained some but not all of the nutrients in which their diets fell short, and the remaining fourth were taking precisely the long supplements. This was a relatively low income group. For the Boston group studied by Widson (1962), about half were taking vitamin supplements daily, usually on the advice of their physicians.

Steinkamp and coworkers (1965) found that in a group of 273 men and women of average age 75 years, 35 percent took vitamin and mineral supplements, and these usually were individuals who already had adequate nutrient intakes. In McGandy's study (1966) of successful business and professional men, the majority met the liberal National Research Council allowances by diet alone; yet over half the group used vitamin and mineral supplements.

Thirty-five percent of an elderly group (50 years and over) in Syracuse, New York, were taking nutrient supplements at the time of a nutrition survey, (Dibble *et al.*, 1967).

D. APPLICATIONS OF NUTRITIONAL KNOWLEDGE

Feeding of the Aged

The preceding discussion has been in terms of nutrients, but it must be remembered that food is the vehicle for nutrients. Food is what people eat. And the kind of food they eat is intimately associated with home and family background and everything that has happened to them throughout the preceding years (Beeuwkes, 1960). Obtaining an adequate diet is influenced by the following factors.

(1) **Food habits.** What one eats is the basis of his nutritional status. Selection of food is determined by economic, social, physiologic, and psychologic factors. All of these factors interact, and one or another may be dominant at a particular period and for different individuals. Added to and influenced by these factors, are what are usually summed up as food habits, which originate in early childhood, dependent on what one learned to like at home and the cause that was what was served there. Ethnic, religious, and cultural-social factors are strongly influential in the formation of food habits, and though these habits may be modified later in life by education, and by widening experiences and socialization, the elderly often revert to food habits of childhood. Food is specially and distinctively involved in human behavior (Mead, 1964).

Food is rich in symbolism and has many emotional connotations. It is used as reward and punishment, and a means of expressing hospitality, friendship, affection, security, gratitude, prestige and status, individuality and conformity. It has many religious restrictions, and customs for various ages and conditions. Origins of beliefs about food may be lost in history, but a combination of beliefs, traditions, and psychological reactions continue today.

There is no justification for expecting everyone to eat the same food prepared in the same way. Individuals, young and old, differ in the foods they will accept because of many influencing factors, including home and family, ethnic, cultural, and religious background. Feeding the elderly cannot be done according to a single pattern. Provision of foods and preparation of meals consistent with the life patterns of the individuals are significant factors in maintaining their sense of dignity and self-respect. Application of nutrition science plus human understanding makes it possible to meet nutritional needs from a wide variety of food combinations and meal patterns. Failure to eat may be an expression of anxiety, fear, suspicion, feeling of rejection (Blumenthal, 1956), depression, confusion (Weiner, 1969).

Psychologic factors associated with food and eating may become accentuated with age. For the chronically ill and institutionalized, an understanding of these factors and attention to them is essential.

The question of food habits is not a matter that demands more time from the dietitian or those in charge of food service, but requires rather a redirection of knowledge and efforts.

(2) **Economic factors.** Although this subject will be dealt with in another paper, it cannot be overlooked here. Food costs money and must compete for a part of the family dollar with other essentials of living. Inflation and rising cost of living have left those on fixed incomes (savings and retirement income originally planned as adequate for later years of life) in the position of being unable to purchase adequate diets.

Income is an important factor but it alone will not provide for dietary adequacy. The national household food consumption survey by the U.S. Department of Agriculture found that at successively higher incomes a greater percentage of households had diets meeting the recommended allowances, but over one-third of the households with incomes over \$10,000 had diets which were below the allowances for one or more nutrients (U.S. Department of Agriculture, 1968).

(3) **Housing.** This factor is to be dealt with in another paper, but since it directly influences the access to and availability of food, and therefore the nutritional well-being of the elderly, brief reference and emphasis must be made here. The elderly couple, the widowed elderly relatives, or single individuals may continue to live in the old family home or similar housing unsuited to the lack of mobility and physical handicaps imposed by aging. The elderly may live in walk-up apartments or rooms, making it difficult or impossible to carry groceries up several flights of stairs. Any or all of these types of housing may be distant from markets or food service facilities, and also may be entirely lacking or inadequate in storage and refrigeration facilities, kitchen area and equipment, or food-preparation facilities. Public housing for the elderly should provide adequate and easily-accessible group-feeding facilities for the residents.

(4) **Transportation.** This subject will be dealt with in another paper, but is a vital factor for the elderly in obtaining food. Distance from food markets and eating places, physical inability to carry food supplies to their residence (and up flights of stairs in walk-up apartments), and absence of relatives or friends to help in transportation, militate seriously against maintenance of nutritional needs.

(5) **State of health.** The mature and elderly frequently are handicapped in physical activity. Some require special diets, but may be unable to afford the required food or have failed to receive any or adequate counseling on how to obtain and prepare that diet. Some are handicapped by lack of teeth or ill-fitting dentures with accompanying difficulties in chewing food.

(6) **Lack of information.** For the elderly, the lack of information regarding community resources, programs, and counseling that might be available is another problem in gaining adequate nutrition.

(7) **Food fads and quackery.** The extent of food faddism and quackery is difficult to determine. But it has been estimated to cost many millions of dollars annually for worthless expenditures and to affect more than 10 million of our population (Smith, 1965). In their later years, individuals become more concerned about health and are more credulous of the

promises of prevention or relief from pain and illness that assail them on all sides from promoters of spurious or unnecessary articles of diet.

Use of vitamin and mineral supplements is one aspect of this problem which has been discussed in the preceding section on dietary studies.

(8) **Education.** The level of education appears to influence the adequacy of diets. Haefer (1970) reported finding less anemia and fewer low hemoglobins and low serum vitamin A values when the housewife had a higher educational level. However, this situation occurred only when the income was above the poverty level.

There is general evidence that those with more education are likely to have better diets. There is also equally good evidence that some information on food selection and preparation is a necessary part of that education if diets are to be nutritionally adequate.

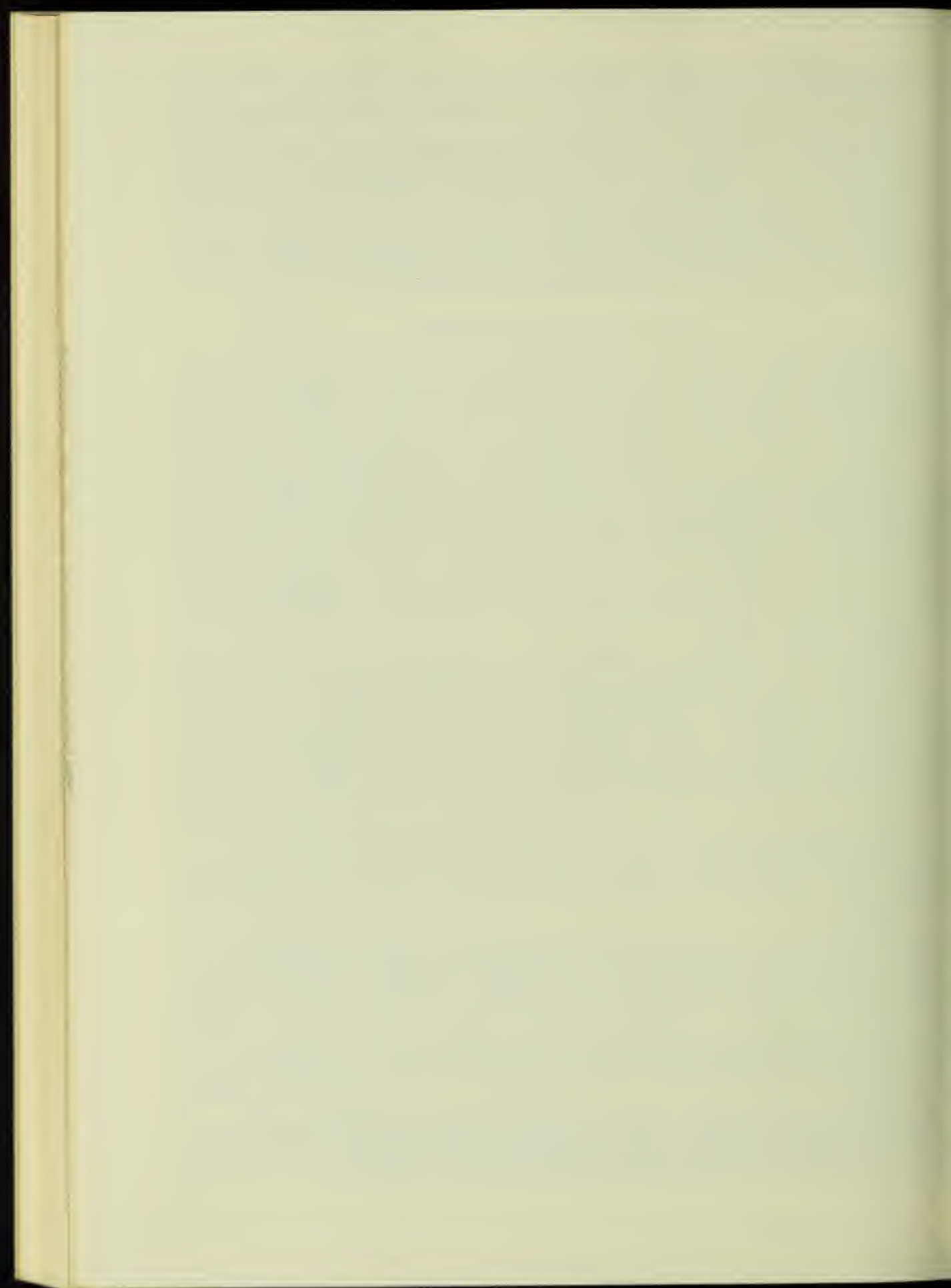
E. NUTRITIONAL IMPLICATIONS

"Should foods be fortified?" is a question being asked because of dietary study findings. Evidence presented above regarding the nutrients essential for maintaining satisfactory nutritional status shows that such nutrients are many in number, that they are not all obtained from the same foods—making a variety of types of foods needed in the daily diet—and that some nutritional knowledge is necessary in order to select an adequate diet. Dietary studies show that many segments of the population choose inadequate diets and that these segments predominate in the low income groups. Lowered caloric requirements of the elderly means that less food should be consumed. But since the nutrient requirements remain approximately the same, foods high in proteins, minerals, and vitamins must be selected, and these are the more expensive (and therefore financially unattainable by many) types of food. Vitamin and mineral supplements are widely used but frequently are not the ones needed to increase the nutritive value of the diet. Iron-deficiency anemia has been reported as commonly occurring, and dietary deficiencies of calcium, vitamin C, the B-vitamins, and vitamin A have been observed in dietary studies.

Based on such findings, the question has been raised as to the practical value of identifying certain staple foods of the national food supply and thus making all nutrients readily available to all people. There are arguments pro and con for such a proposal. Enrichment, fortification, and fortification are terms currently used. Originally, these terms each had a definite meaning and specific usage, but today they tend to be used interchangeably. For the sake of brevity here, the term fortification will be used. This is not a new idea. Since 1941, the fortification of certain vitamins and minerals to specific foods has been endorsed by the Council on Foods and Nutrition of the American Medical Association and by the Food and Nutrition Board of the National Research Council. Milk is fortified with vitamin D; margarine with vitamin A; table salt with iodine; and cereal products such as bread, flour, and grits with iron, thiamine, riboflavin, and niacin. In some states the fortification of some of these products is mandatory. But in general the consumer can make a choice between the fortified and nonfortified products.

Further fortification of these and other foods presents problems. The requirement for different nutrients varies with age, sex, and caloric intake; there is wide individual physiologic variation in requirement and thus there is inherent danger of excessive intakes. For example, trace elements, essential in small amounts are "known to cause injury at high levels of intake and to interfere with the utilization of other elements" (National Research Council, 1963). Toxic effects can be produced by high intakes of other minerals and of fat-soluble vitamins. The nutrients do not each function alone in the body: they interact continuously, and the efficiency of body processes may well be influenced in a variety of ways by the lack of or an excess of another.

More knowledge of nutrient requirements and interactions is desirable, and assurances should be provided for protection against excessive intakes. Further fortification of various foods is encouraged only with the above factors considered at all times.



IV. THE PRESENT SITUATION

In Section II, Long-Range Goals, reference was made to some of the long-continuing programs of Federal agencies and to the direct concern of professional organizations. Reference should also be made to the nutritional research, teaching, and services being carried out by universities and medical teaching centers throughout the country, with many aspects of these programs dealing with or related to the aging needs. Some of the more recent programs developed to assist in the solution of nutritional problems particularly of older people need to be reviewed and evaluated.

A. PROGRAMS SERVING THE ELDERLY: ADEQUACY AND DEFICIENCIES

The Administration on Aging

This agency has actively stimulated community endeavors in providing improved nutrition services for the elderly by making grants for experimental projects. These projects are designed to provide low-cost meals in a social setting, nutrition and consumer education, and evaluation of the effectiveness and efficiency of services provided. Projects are underway in rural and metropolitan areas with different ethnic, cultural, and religious groups, providing sup-meals and socializing, and meals delivered to the home bound. Results from these projects are not available yet, but should be a valuable guide for other communities throughout the country.

The Cooperative Extension Service, U.S. Department of Agriculture

This service has extended its nutrition education programs in a new way. The expanded Food and Nutrition Education Program (EFNEP) is directed to homemakers, therefore reaching directly and indirectly to the mature and elderly. Focus is on the hard-to-reach poor with special efforts to get to low-income blacks, Spanish-speaking and Mexican-Americans, and Indians, as well as to white families. Both urban and rural families are served by the program; in June 1970, approximately 60 percent of the families reached were in urban areas. Close cooperation is being developed with community organizations and agencies.

The program involves seeking out families in need and working with them by telling, showing, and helping them in their own homes to manage better with what they have. The "teaching" is done by local women who are nonprofessional, part-time paid workers who understand the people they are dealing with and can therefore gain their acceptance. These aides receive 30 hours of training in food and nutrition and do their work under the supervision of an extension home economist. The program started on a nationwide basis in January 1969 after intensive testing and evaluation of a pilot program in Alabama from 1964 to 1969 (Turner and Kleen, 1969).

This program is growing. It is estimated that 10,000 aides will be employed by June 1971. The program is also being evaluated by an independent research firm as well as by the Economic Research Service, U.S. Department of Agriculture.

EFNEP appears to be achieving its goal and getting to low-income homemakers who possibly cannot be reached any other way. However, only a small segment of the population is being reached, and "one-to-one" teaching is a slow process and expensive (one aide generally works with 45 to 50 families at a time).

3. U.S. Department of Agriculture Food Stamp Plan and Donated Foods

This program has had varying success in different parts of the country partly due to variable support and local administration of the program. Revisions have been and continue to be made in the food stamp plan, and it is not possible in this paper to evaluate its current success.

4. Community Programs

4.1. Home-Delivered Meals.

Also referred to as meals-on-wheels, portable meals, and mobile meals, this is a nonprofit system of delivering meals to the homebound elderly, ill, and handicapped. These programs are usually sponsored by public or private organizations and groups in the community with much of the work done on a volunteer basis. In some cities the program is hospital-based, available to patients in need of special diets or to the aged, chronically ill person. Recipients of home-delivered meals may pay for the meals at a minimum charge, but those unable to pay may have their meals funded by some community group.

There are some commercial portable meal services but the price of meals is beyond the reach of assistance-recipients.

Home-delivered meals is an expert function and requires vigilance in all aspects of sanitation. Nutrition counseling is necessary and dietitians and public health nutritionists frequently volunteer their services. The National Council on Aging (1965) has prepared an excellent comprehensive publication on all aspects of home-delivered meals. The council sees this type of service as adding to the dignity and comfort of living in one's home (apartment or furnished room), although there is the hazard that this service may intensify loneliness in the life of the homebound elderly. Suggestions are made in the publication for the cooperation of other groups or agencies in providing social contacts. The National Council on Aging states that the feasibility of nonprofit home-delivered meals has been amply demonstrated: they can be well-structured and operated, and soundly financed through voluntary or public funds, or a combination of both. Although many communities are providing some form of portable meal programs, many in need are not being reached by this service.

4.2. One Full Hot Meal Daily.

Another type of program is the provision of one full hot meal a day by community groups of various kinds. In some of these programs the elderly take pride in participating in the preparation and service of the meal. The socialization thus provided is an important factor along with the nutritional benefits of the meal. In some programs of this type informal instruction is given on food and nutrition. These programs are dependent on community concern, leadership, and volunteers. Centers used for this type of meal service differ widely in locale: public housing, school facilities, community centers, recreation centers, and church facilities are all being used.

4.3. "Senior Citizens Plate."

A senior citizens' committee of the Self-Help for the Aging Agency of San Francisco has, with the help of community agencies, the California Restaurant Association, and others, developed an imaginative program called "Senior Citizens Plate." By this program, the elderly living in the San Francisco downtown area can obtain a low-cost (\$1.00) complete meal supplying at least two-thirds of the daily protein requirement. These meals are available at the nonrush serving hours in the cafeteria. This program, however, does not reach the very low-income or the homebound citizens.

5. Nutritional Information Contributions of Industry

Some industrial concerns, business organizations, and insurance agencies have prepared very good nutrition information which is readily available for wide distribution. These serve a worthwhile purpose. But unfortunately, the average citizen cannot distinguish between this reliable information and the faddist, or misleading, information which is distributed by other concerns. Also, the average homemaker and the elderly do not seem inclined to read printed material. In the low-income groups, literacy level is frequently low. A similar fate of not being read happens to many excellent publications of Federal agencies, as well as to the State and local publications by professional groups.

There is an urgent need to find ways to reach all levels of the population through the printed media and through other media of public acceptance.

6. Problems Identified in Community Programs

From reports on the programs just described and discussions of those providing the services, the following problems have been identified as of frequent occurrence.

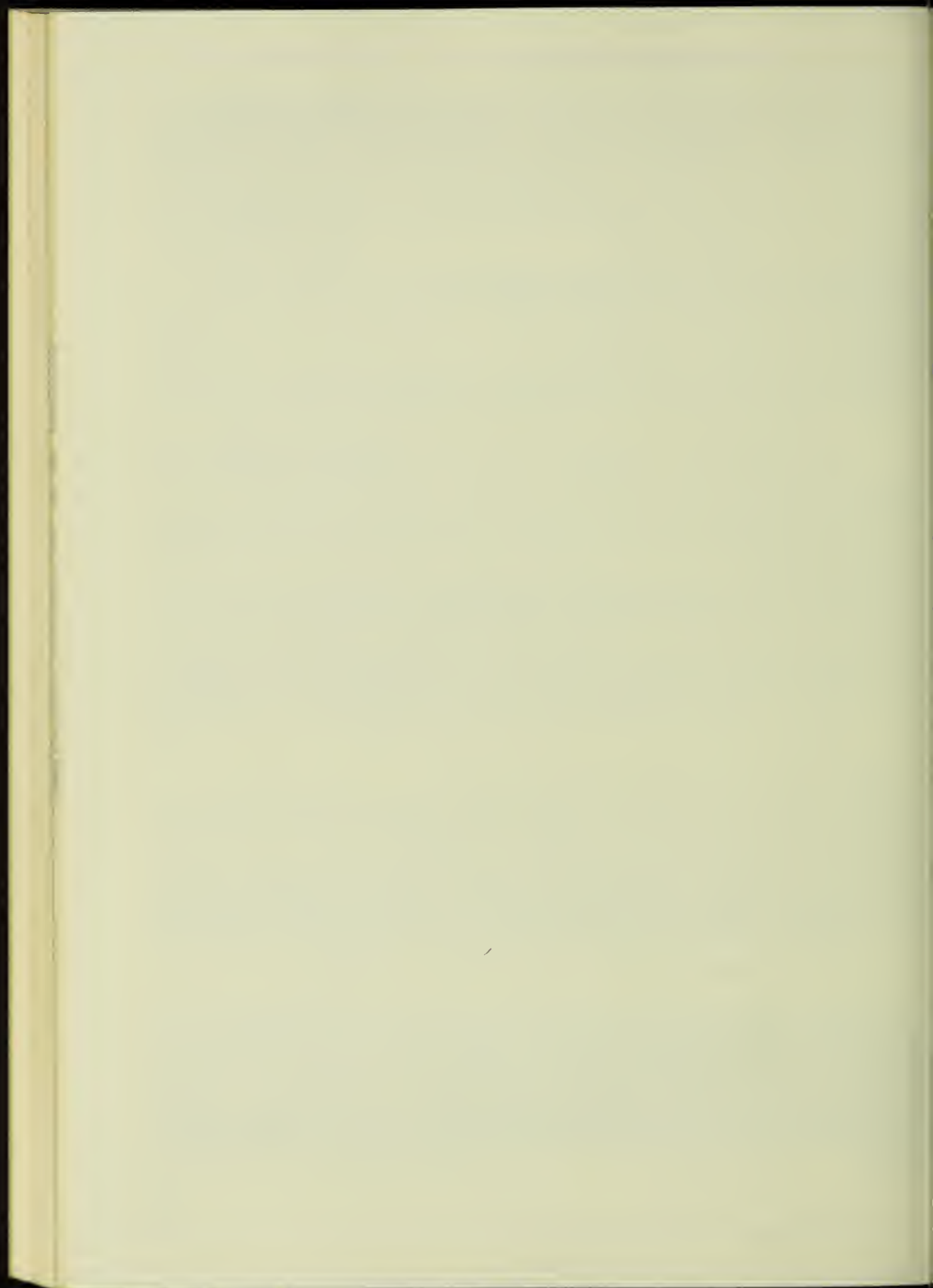
- (1) Many of the elderly cannot meet the cost of adequate nutrition. Even those with knowledge and motivation cannot pay for the meat, milk, fruits, and vegetables which are the main sources of protein, minerals, and vitamins.
- (2) Transportation to shopping centers, to food distribution and food stamp centers, and to the places where group meals are served is not available to many individuals.
- (3) In communities where nutrition and feeding programs of various kinds are in effect, many in need do not know about them, and are not reached.
- (4) The elderly who participate in food service programs are frequently found to be in need of other health services which cannot be supplied by the nutritionists.
- (5) There is lack of knowledge by the elderly of what to buy, how to get the best values for money spent on food, and how to prepare food.

Deficiencies of present programs may be summarized as:

- (1) They do not reach enough people, especially failing to reach people in small towns, rural communities, and isolated rural situations.
- (2) Food stamps do not solve the problems of those who are physically unable to shop for food, or are unable to reach food markets and eating places, or lack cooking, storage, and refrigeration facilities for food; nor do food stamps meet the needs of those who desire to retain their dignity and sense of independence.
- (3) Home-delivered meals do not solve the problem of loneliness.

In some of the programs described, ways have been found to meet some of these problems, but these solutions are the exception more than the rule. Programs that reach the elderly, where they are—geographically, financially, socially, educationally—and from other aspects of their individual needs, are still comparatively few.

Recognition of the problems involved demands concern for one's fellow man; the will to do; leadership, cooperation, and coordination of information and services; and imaginative planning. All these appear to be the essential ingredients for meeting the nutritional needs of the elderly.



V. ISSUES

There is no question that it is the right of everyone living in the United States to be well nourished. But to achieve such a goal will require that thoughtfully developed national policies be agreed upon and then implemented. Although older people have some special nutritional problems, policies which benefit the nutrition of one age group will, in general, benefit the others as well.

To improve the nutrition of the nation will require a great effort on the part of government at all levels, of voluntary organizations, of business and industry, and of the individual citizen himself. Some of the major questions proposed for consideration by the Nutrition Section are:

1. Should Federal funds which are available for nutrition be allocated to providing food or should some part of such funds be allocated to research on nutritional problems?
2. Should the major responsibility for enforcing national standards for good nutritional practices in institutions serving older people be a responsibility of the Federal Government?
3. Should all available funds be allocated to providing food for those in need, or should some proportion be used to educate people in the better use of foods?
4. Should there be new types of food facilities established to make it possible for older people to eat their meals in the company of others, or should food service be provided for persons in their own homes?
5. To help low income older people enjoy better nutrition, should society: (a) provide them directly with foodstuffs, or (b) give them more money income so that they can purchase their own foods?
6. Should the control of the wholesomeness of the foodstuffs sold on the market be under stricter government control, or should the control be left mainly to the food industry?

Issue 1.

Should the Federal Government allocate substantial funds for research on the influence of nutrition on the aging process and on the diseases of old age? Or should such monies be concentrated on action programs to rehabilitate the malnourished aged and to prevent malnutrition among those approaching old age?

It is a hard decision to choose whether to devote a significant amount of limited resources to research which promises most benefit to future generations, or to devote all available funds to providing goods and services needed by the present generation. For example, today there are hungry and malnourished old people in the United States. Is our first priority feed them? Or should we spend our money on searching out how nutrition is related to aging in the hope that this knowledge will help the next generation to enjoy better health and

a longer life? Below are arguments supporting each point of view to aid in recommending the policy you feel this country should adopt.

The influence of nutrition on the aging processes and on the diseases of old age is a relatively unexplored field. Much more research is needed to ascertain whether proper nutrition throughout life can delay changes within the cells of the body which are associated with aging and which lead to degenerative tissue and cellular changes.

Present available knowledge in nutrition, although far from complete, is not known for the major proportion of the population, including the older age group. Action programs based on what we know could contribute much to the normal growth and development of children, to active and productive years of young adulthood, and to the delay of onset of at least some of the degenerative changes associated with aging.

But as good as research may be, there are the aged who are malnourished who should be located and rehabilitated so that they may live out their lives in comfort and in the best health that is attainable for them. They have made contributions to society and the welfare of our country in their active years and should not be neglected when they are in need.

It is equally important to use every practical means of maintaining the health and well-being of the middle aged and preventing the occurrence of health problems associated with inadequate food and nutrient intakes.

Issue 2.

Inasmuch as food and nutrition services are vital components of total health services, should the Federal Government move more forcefully to establish higher standards for the food services provided by institutions and home care agencies? Or, can the interests of the consumer be better served by demanding a higher level of performance of State government enforcement agencies where the primary responsibility for such regulation now lies?

Supervision of nutrition services in institutions and home care agencies is essential if it is not now adequate, judging by surveys of such institutions and agencies. Standards should be established and strictly enforced for such important areas as food service, quality and nutritive value of food, methods of handling, preparing, and servicing of food, the therapeutic and dietary needs of the institutionalized aged, and the availability of nutrition counseling. One can argue that only the Federal Government can assure enforcement of uniform standards throughout the country. The Federal Government could not itself enact and administer a national code for nutrition services, but it could insist upon the meeting of high standards as a requirement for sharing in Federal grant programs.

On the other hand, perhaps too great uniformity would not really be in the interest of consumers because there is great variation in the population of the United States. One can argue, therefore, that State supervision and regulation would be closer to the consumer and hence more sensitive to consumer needs, opinions, and cultural food preferences. For example, older people in some ethnic groups have long-established tastes for foods prepared in special ways and are unlikely to relish other types of food preparation or to change their eating habits. Local supervision of food services could take these facts into consideration and establish regulations which respect the differences among different population groups.

State regulations may also be more desirable than Federal regulations because the States may be able to set higher standards and require higher levels of performance than would be feasible nationally. Experience shows, however, that when such regulatory matters are left to the States, not all of them will establish and enforce adequate standards.

Issue 3.

Should governmental resources allocated to nutrition be concentrated solely in the provision of foodstuffs to those in need? Or, should a substantial proportion of such resources be devoted to education of all consumers, especially the aged, about nutrition and to the education of those who serve the consumer in professional and related capacities?

Present national policy is geared toward improving the availability of foodstuffs which are essential for nutrition. Many argue, therefore, that the poorly nourished need only to be supplied with food to become adequately nourished. They assume that knowledge of nutrition is instinctive or acquired by contacts with others in the same ecologic system. This would mean that given the availability of the range of foodstuffs available in the locality in which the person lives, he will know or have learned by experience what foods to eat in order to satisfy his bodily needs. It could, therefore, be maintained that to put tax dollars into educating people about nutrition is a luxury.

On the other hand, many persons maintain that provision of foodstuffs alone will not meet the nutritional needs of consumers who may not know how to plan or prepare meals. This could apply especially to old people whose nutritional requirements have changed as they have aged. They may be unaware of the need for certain protective foods, and may refuse to utilize items that are unfamiliar or less well liked despite their nutritional value. Thus, some people argue that education about nutrition is essential and should be made available through educational resources and media used by older persons.

Professionally trained and staff personnel have great influence on nutrition practices of consumers and, of course, on the manner in which they feed themselves. Yet many of these trained and related persons are themselves inadequately versed in nutrition. These persons, as well as the consumers, need special education about nutrition. But the numbers of persons qualified to offer this instruction are too few to meet the need. Incentives to enter the nutrition field have been too weak. The resources required to mount a satisfactory educational effort for both consumers and providers of nutritional services are so great as to suggest that they can be provided only if there is substantial support from the Federal Government.

Issue 4.

Should Federal Government policy for all Federally assisted housing developments for older people require meal services for group feeding of residents and for persons living nearby? Or, should the policy be to encourage provision of services and facilities for feeding within each household in the project (individual feeding) and for encouraging community agencies to provide for persons living in their own homes outside the development?

A major problem of old people is that they frequently do not have transportation facilities, motivation, or physical capacity to reach food markets or group eating facilities. One solution for those living in special Federally assisted housing projects would be the provision of meal service facilities in all such housing projects. These facilities could provide one to three meals daily, adequate in nutrients, and at minimum cost to residents. As an added advantage such services could provide employment for capable older persons who want or need to work. What is also well worth taking into consideration is that these food service facilities could be available to the elderly living within easy reach of the housing project.

Optimum nutrition within individual households (intra-household) depends upon ability to procure food and prepare meals by persons sufficiently motivated to undertake these chores. Or else, meals prepared elsewhere by caterers must be delivered to the household and

paid for by fee for service, by philanthropic donations, or tax dollars. Such home services may of course, result in many older persons eating alone and having only sporadic social interaction with others. Nevertheless, intra-household facilities and meal preparation retain traditional values and permit a sense of independence and privacy not attainable in group feeding situations.

Issue 5.

Should the Federal Government assume the responsibility of making adequate nutrition available to every American? Or, should this responsibility be left to the individual, his family, and/or to the private sector voluntary groups and State and municipal agencies? If left to other than the individual or his family, should the fulfillment of the obligation be based on the provision of money income or the provision of food, facilities, and services?

Society assumes the right of each citizen of this country to adequate nutrition. However, the responsibility of fulfilling the intent of this right has been left largely to the individual or the family.

Yet in many population groups, the individual and the family have failed to meet this responsibility. In some groups, inadequate money income has been the reason; in others, lack of sufficient food required for adequate nutrition. In still others, it has been the lack of sufficient knowledge about nutrition often combined with inadequate income or absolute lack of food.

These facts suggest that there should be greater intervention by the Federal Government to bring about improvement of the situation. Assumption of the obligation of making adequate nutrition available to all people, however, implies an even more complicated bureaucratic arrangement than the now familiar commodity distribution and food stamp programs. It would also require the training of significant numbers of new personnel to staff the necessary programs.

But regardless of which policy is adopted in regard to fixing the obligation to provide adequate nutrition, the issue of how to meet it remains. On the one hand, provision of adequate money income has the advantage that it leaves the initiative with the individual and the family. But it also implies a need for great improvement in education and motivational factors leading to good nutritional practices if the dollar income is to provide adequate nutrition. On the other hand, provision of food, facilities, and services insures achieving the objectives more rapidly but with the loss of individual freedom of choice. It also avoids the necessity of developing complex systems for the provision of adequate nutrition.

Issue 6.

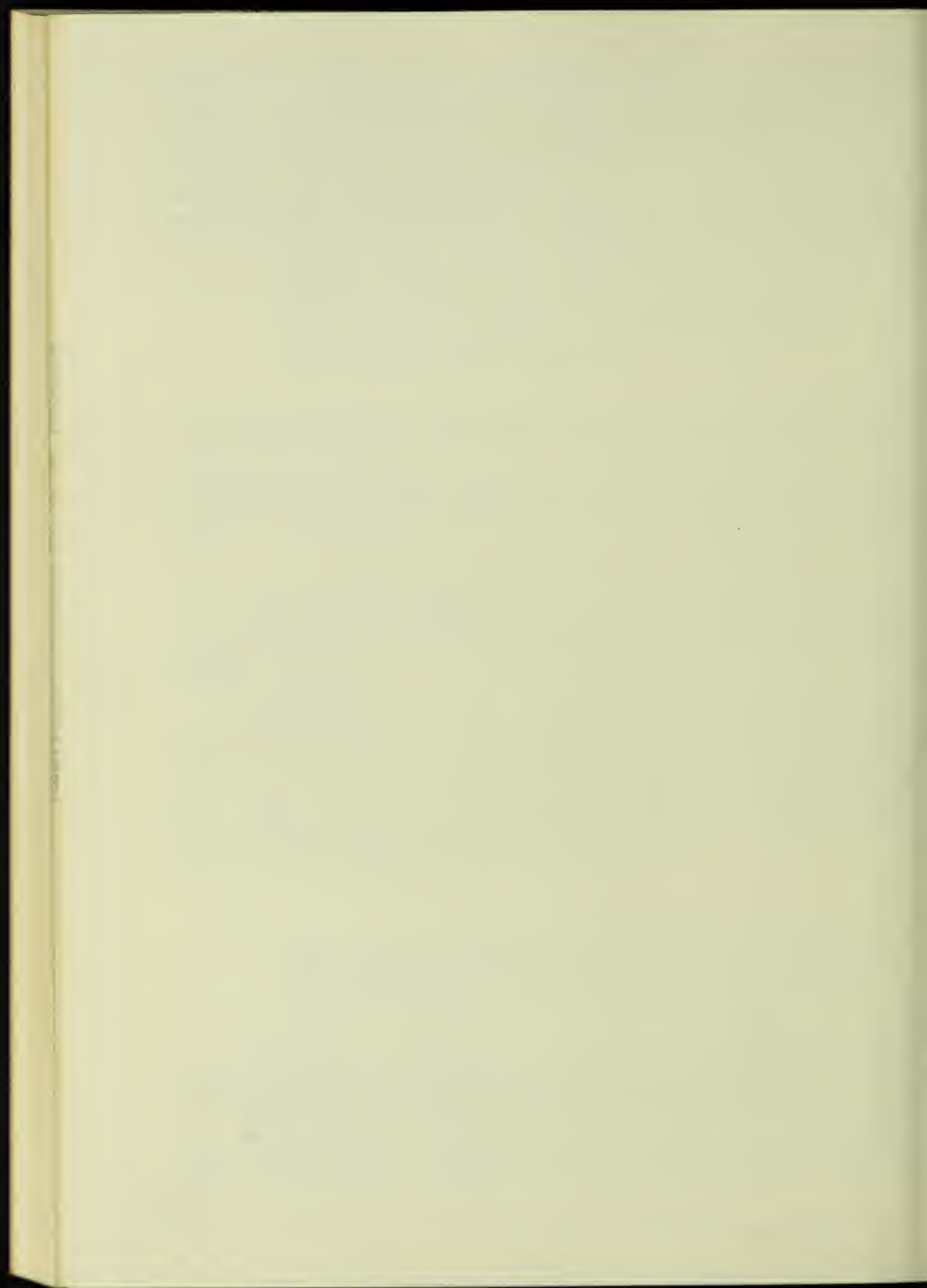
Should there be considerably more governmental control of the safety and wholesomeness of our national food supply? Or, should this be chiefly a matter of private and voluntary responsibility, with government controls left about at its present level or reduced?

Older people are no different from persons of any age when it comes to wanting and needing a safe wholesome food supply. All are dependent upon supervision and regulation by State and Federal agencies working in cooperation with the food industry.

There is much concern today on the part of many individuals with the safety of the food supply (pesticide residues, mercury, artificial sweeteners, preservatives, colors, and chemical additives, etc.). People are also worried about the wholesomeness of their food (empty calories, effects of processing, natural versus organic foods, enrichment). They

concerned, too, about the effect of the chemicals and the processing of foods upon the nutrition related diseases. Such concern, they insist, is properly the subject of governmental attention and, possibly, increased public regulation.

One may question the degree of concern expressed, because most all professionally trained nutritionists and the scientific community assure us that our food supply in the corner grocery store and supermarkets is now safer than at any time in our history. This has come about through governmental control and by voluntary action of private industry which can readily produce new nutrients and innovative foods along with improved labeling and advertising. The force of this argument would be to recommend a policy that would continue government control at about its current level or perhaps to even lessen regulations in some areas.



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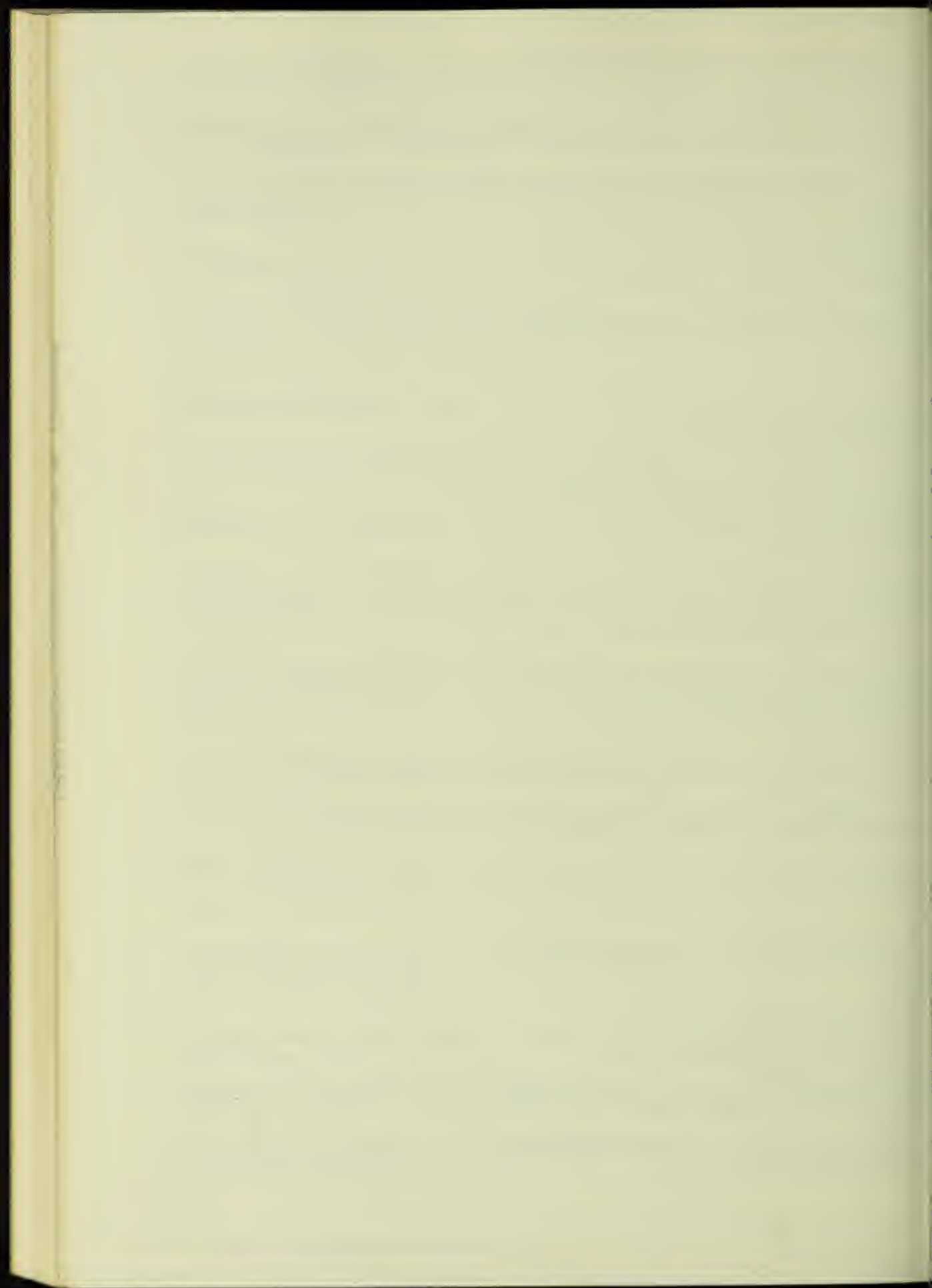
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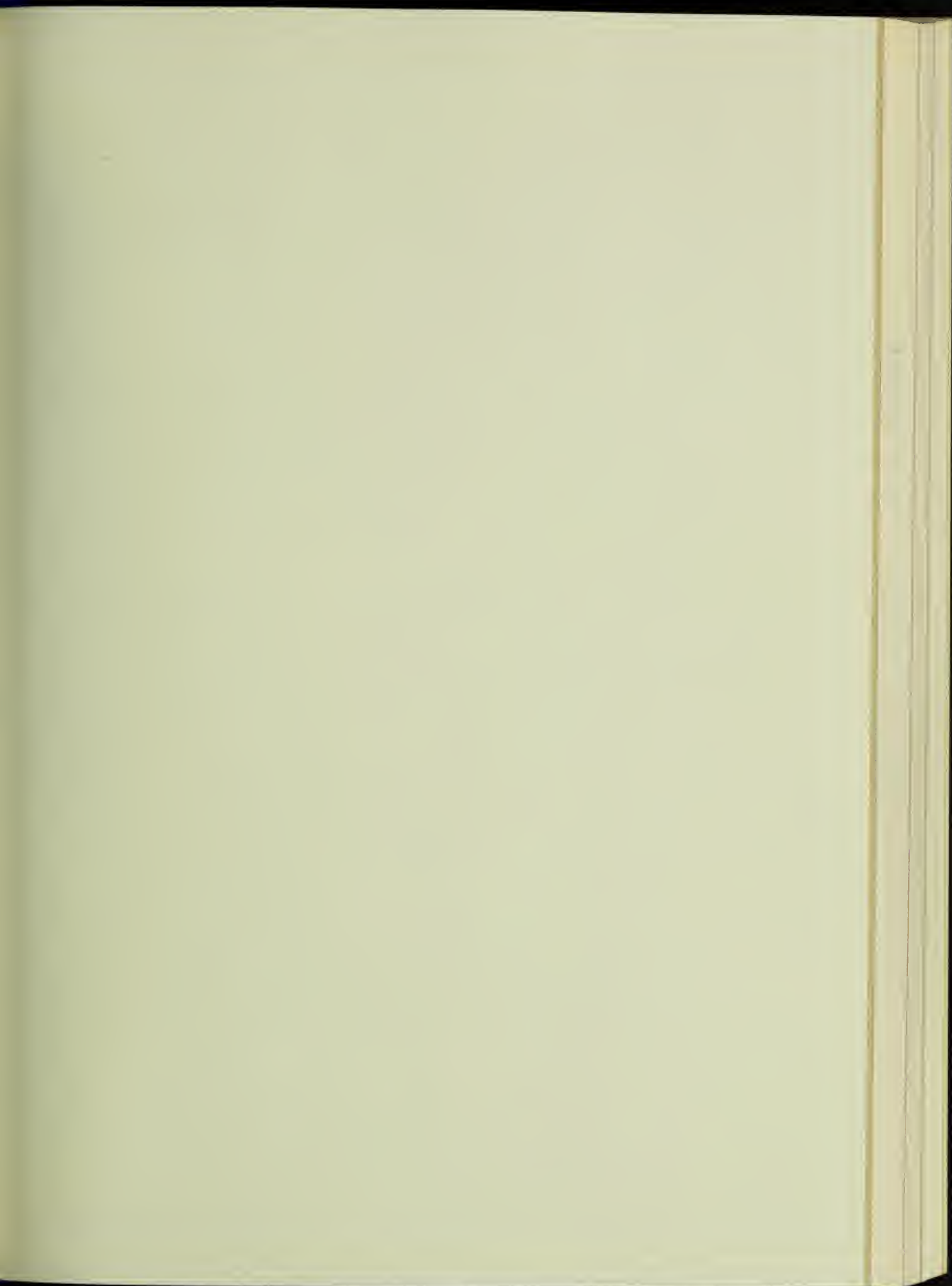
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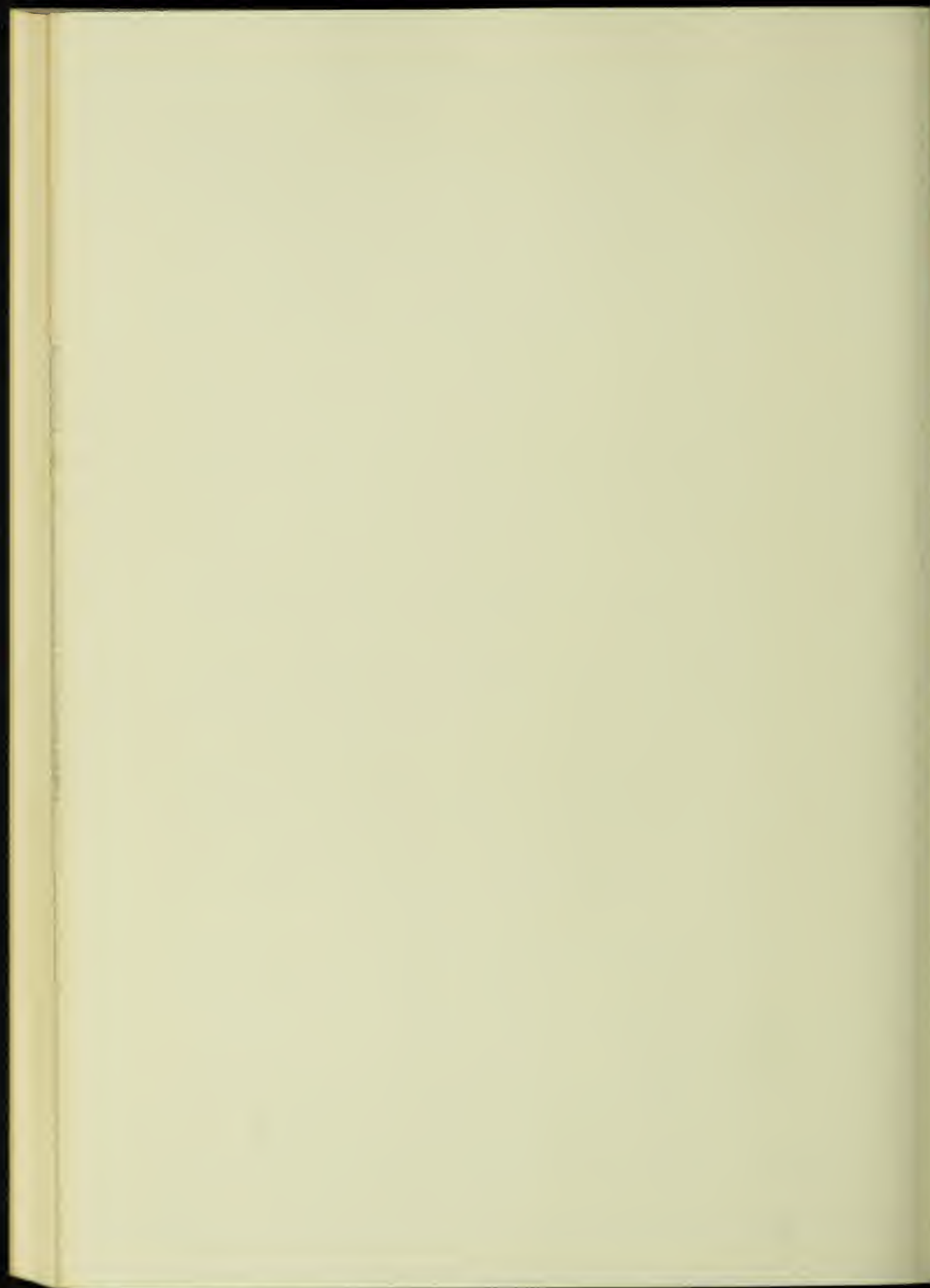
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Background and Issues

PHYSICAL AND MENTAL HEALTH

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PHYSICAL AND MENTAL HEALTH

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Mental Health:

Alexander Simon, M.D.

ISSUES

The Technical Committee on Physical and Mental Health
with the collaboration of the authors

Edward J. Lorenze, M.D., Chairman

White House Conference on Aging
Washington, D. C. 20201
March 1971

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1971 WHITE HOUSE CONFERENCE ON AGING

PHYSICAL AND MENTAL HEALTH

BACKGROUND

Physical Health:

Austin B. Chinn, M.D.,
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Edith G. Robins, B.S.

Mental Health:

Alexander Simon, M.D.

ISSUES

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Physical Education

FOREWORD

This paper on Physical and Mental Health provides information for the use of leaders concerned with the development of proposals and recommendations for national policy consideration and of delegates to the national White House Conference on Aging to be held in Washington, D.C., in November-December 1971.

This background paper contains three major parts: Part One deals with the area of Physical Health; Part Two with Mental Health; and Part Three with issues to be resolved in both of these areas. Parts One and Two of the paper discuss: the need for a national policy that would meet both the physical and mental health needs of the elderly; goals proposed by previous conferences and groups; knowledge available relative to present programs designed to meet these needs; and identifiable gaps in the area of health. Part One of the paper on Physical Health was prepared for the Conference by Austin B. Chinn, M.D., Consultant on Aging to the Health Services and Mental Health Administration and Representative of the Assistant Secretary for Health and Scientific Affairs, Department of Health, Education, and Welfare for Coordination of Health Staff Endeavors for the White House Conference on Aging; Edward S. Colby, M.D., M.P.H., Community Health Service, HSMHA; and Edith G. Robins, B.S., Coordinator for Health of the Aging, Community Health Service, HSMHA. Part Two of the paper on Mental Health was prepared by Alexander Simon, M.D., Professor and Chairman, Department of Psychiatry, University of California School of Medicine, and Medical Director, Langley Porter Neuropsychiatric Institute, San Francisco.

Part Three of the paper identifies major issues relevant to improving the physical and mental health needs of older people. The issues were formulated by the Technical Committee on Health for consideration by participants in White House Conferences on Aging at all levels and by concerned national organizations. The purpose of the issues is to focus discussion on the development of recommendations looking toward the adoption of national policies aimed at meeting the health needs of the older population. The proposals and recommendations developed in Community and State White House Conferences and by national organizations will provide the grist for the use of the delegates to the National Conference in their efforts to formulate a National Policy for Aging.

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for the 1971 White House Conference
on Aging

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PART ONE: PHYSICAL HEALTH

I. INTRODUCTION—THE NEED

Health is a very complex subject. In the preamble to the constitution of the World Health Organization health is defined as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (Kilbourne and Smillie, 1969). This definition suggests that physical well-being is not, in itself, sufficient for health but that mental and social factors must also be simultaneously considered. Although the focus of this paper is on physical health or well-being of the aged, it will not neglect consideration of these other dimensions.

The terms "aged" and "elderly" have no formal definition in the health field. Individuals from the years 45-64 have been referred to as aging; from 65-80, as the young-aged; and those 80 and over, as the old-aged. The use of the general terms "aged" and "elderly" must be recognized as an expedient way of expressing the enormous diversity of personal attributes, life styles, and experiences that characterize individuals of age 45 and older. Although this paper is concerned with all of these people and their physical health problems, it is especially concerned with those over 64 years of age.

As a background for developing and discussing important issues related to the physical health of the aged, this section considers the physical health needs of the aged. A "need" usually connotes a deficit or deficiency of something—some attribute that a person or a group lacks. If a health need is met and eliminated, it is assumed that the aged would come closer to enjoying the quality of life that is within their potential.

The physical health needs of the aged are many and varied; here they will be broadly identified and discussed under four general but related needs categories. First and foremost is the need for better health. This cannot be accomplished without filling a second general need for certain types of health services that are appropriate to the present state of health of each aged individual and that function to maintain or improve that state. Then, there is the need to organize the available health manpower, health facilities, and financial resources into a coordinated health system for the efficient and effective delivery of those essential services. Finally, there is the need to remove the socio-economic barriers that prevent or restrain the aged individual from gaining ready access to this system and from enjoying the potential benefit of the services it has to deliver.

A. IMPROVEMENT IN HEALTH

The magnitude and severity of the physical health condition of the aged are set forth in detail in Section III. Knowledge Available. The data clearly indicate the necessity for improving the physical quality of their lives and make it mandatory to place as *their principal*

Note: The two background papers are the work of the authors. Minor editorial changes have been made by the editors in accordance with the outline and style adopted for all of the 1971 White House Conference on Aging background papers.

and most urgent physical health need, the need for a significant reduction in the amount of death, disease, disability, discomfort, dissatisfaction, and social disruption that they experience as a result of illness, injury, and the process of aging itself. This need is so fundamental, so crucial, that it may be thought of as an end in itself. All subsequent needs that are described may be viewed as steps toward or means of filling this health need.

Since most of the biological changes that occur in the body as one ages do not improve one's capacity to resist or weather the unfavorable alterations in physical health status due to disease and injury, there is a closely associated physical health need to understand more about the human aging process itself so that we may one day, hopefully, control it and increase the human life span.

B. APPROPRIATE HEALTH SERVICES

In order to bring about the necessary reduction in death, disease, disability, discomfort, dissatisfaction, and social disruption, *there is a second major need, and that is the need for adequate development and provision of certain types of health services—with special emphasis placed upon preventive services to alter both the deleterious course of injury and disease as well as the process of aging itself.*

By health services is meant those activities or responses that are directed toward certain aspects or parts or needs of an individual and that stem from the fields of medicine; surgery; dentistry; podiatry; nursing; nutrition; pharmacy; occupational, physical, recreational, and rehabilitation therapy; health education; and social work. In addition, one can include assistance with financial, housing, transportation, homemaking, general living, sexual, vocational training, employment, retirement, legal, and religious matters. Any one of the above areas may be the source of measures that have either a direct or supporting role in the prevention, therapy, palliation, or rehabilitation of a condition that threatens the physical health of the aged.

The path from health to disease or injury may be hypothetically characterized by several successive stages, each of which can be traversed rapidly or slowly, according to the severity and type of illness or injury and the efficacy of any services used for intervention. Initially, the person is physically well. In the second stage, predisposing risk factors may be present. The third stage begins with the asymptomatic onset of physical pathology. The fourth stage, quite familiar to the elderly person, is ushered in by the onset of mild or severe symptoms. When the symptoms are troublesome enough, people seek medical or formal health related intervention, which begins the fifth stage. The result of that intervention—be it a cure, a long remission before a later relapse of the same condition, mild or severe disability, death, or whatever subsequent health services intervention are needed—forms the sixth and last stage of this path. The path can be conceptually duplicated for each condition when multiple diseases or conditions are present.

It should be clear that the "physically well" elderly person, the one without complaints or perceived symptoms, may already have passed into the incipient, asymptomatic state of disease. The subsequent onset of clinical, or symptomatic, disease may be abrupt or gradual, mild or severe. The course of the disease after clinical onset may be acute or short-lived or chronic, lasting a long time, depending both on the inherent nature and severity of the illness and the efficacy of the therapeutic, rehabilitative, and palliative health measures or services applied.

If the aging process itself may be characterized as "a loss or decline in performance of specific functions due to structural or functional changes in the individual" (Stotsky, 1968)

over time (as opposed to similar changes from disease or injury in the traditional sense) then the skeletal changes (such as osteoporosis), central nervous system changes (such as loss of nerve cells, sensory deficits, and impaired speed of motor responses), and other changes (such as slower rate of healing and slower response to infection) that we now recognize as concomitants of aging may move the elderly person from the "well" category into the "presence of predisposing factors" category—purely on the basis of age. The elderly person is then more susceptible than his younger counterparts to the onslaughts of disease and injury, solely because of having aged. So the older individual, even though he may be ostensibly well, stands ever on the threshold of acute and chronic illness or injury.

1. Services for the Physically Well Person

Primary preventive health services have as their aim the control and alteration of specific causes of disease or injury, the reduction of predisposing risk factors, the alteration of self-destructive personal habits, the augmentation of one's biological defense mechanisms, and the control and reduction of harmful environmental factors in order to prevent, delay, or lessen in severity the onset of the physical or biochemical pathology associated with disease and injury.

Most preventive measures, like all other types of health services to be described, can only be provided after direct contact and communication has been established with the person in need. In the case of the well elderly person this requirement is even more important because asymptomatic people are less likely to seek medical advice and aid. Primary preventive measures even have their place after the elderly person shows signs of illness; that is, his illness may be in one organ system or be of such a nature that it allows, after specific treatment or palliative measures are applied, the application of certain primary preventive measures to other organ systems or for other conditions.

Some specific preventive measures are to be applied directly by the health professional or by the person himself. Other measures may only be transmitted through the more general process of health education and counseling (as information about beneficial personal habits and actions to improve one's social, nutritional, dental, and general physical health and to minimize accidental injury in and out of the home). Preventive measures are most appropriately applied, as with any other form of treatment, after an assessment or diagnosis of the elderly person's health status, or condition. This may be accomplished by a periodic health appraisal, which should include the application of formal screening tests where appropriate. In this manner the stage of physical health the elderly person is in may be more accurately determined.

The aged have a definite need for direct primary preventive services and for the information that is available today when more tangible services do not exist. There is also a need to develop more preventive services; new screening and diagnostic tests to uncover earlier the more vulnerable points in the course (or natural history) of chronic diseases; screening test standards that take cognizance of biological changes with age; and new knowledge about the risk factors that predispose certain people to develop chronic diseases.

Certainly, as Vacek (1969) says, "The prevention of ill-health of the elderly is a problem of medicine as a whole, not only of geriatrics." However, if health is defined not only in terms of disease but as being related to every aspect of the quality of our personal and social lives, then prevention of ill health is a problem for society as a whole, for governments, and for individuals—not for just one or two specific professions.

2. Services for the Acutely Ill Person

The health needs arising from acute illness are usually for the rapid employment of effective therapeutic and palliative measures. It is too late for primary preventive measures even if they exist for this condition, for the person already manifests the disorder. After a diagnosis is made, some form of direct or prescribed therapeutic services is necessary. The aged individual, although experiencing less acute illness, in general, than younger people, is still dangerously vulnerable. Because of a slower response to infection and slower healing, the elderly person is susceptible to a longer and more severe episode of the disease or injury. This type of health service is often called secondary prevention because it has come too late to ward off the onset of disease but hopefully not too late to prevent some of the more unfortunate consequences—such as the onset of a chronic course with recurrent episodes of disease or temporary to permanent disablement. Therefore, the need for therapeutic services for the acutely ill elderly person cannot be minimized.

3. Services for the Chronically Ill Person

Today, the most complex problem in medical care, aside from the treatment and care of the entire individual when he is sick or well, is the management of people with chronic, long-term illness. This problem is difficult enough when the individual is young, but it becomes even more complex in the older person when the altered condition of the body with age is further stressed by one or more chronic diseases. The types of services necessary for care of the chronically ill include therapeutic, rehabilitative, and palliative, or maintenance, measures. These are necessary to reduce the burden of a long-term illness, one that may be subject to a variable course with relapses and remissions, acute crises, mild or severe disability, and ultimately, for some, death. Although services for this group of people are the least productive—either they are applied too late in the course of a long illness to alter it or they lack the capability of effecting a cure at any stage of application or they cannot alter a resulting disability—they are still of some benefit and therefore are needed by the elderly.

C. IMPROVEMENT IN THE DELIVERY OF HEALTH SERVICES

The four general types of services that have been described—preventive, therapeutic, palliative, and rehabilitative—are appropriate at various stages of health and disease. In varying degrees they are mentioned or taught to all health professionals. However, in order to get the maximum benefit from these services and our theoretical and practical knowledge of them, *there is a third major physical health need of the elderly; it is the need for a system (or a systematic way) to adequately and effectively deliver the entire spectrum of the health services appropriate to the well as well as the ill elderly person.*

The current arrangement of health resources and services has many deficiencies with regard to delivering health services to the aged. The present array of manpower, facilities, financing, and types of services is the legacy of a time when chronic disease was unalterable and the elderly comprised a smaller proportion of the population. Although the latter two conditions have dramatically changed in the past few decades, they are given little recognition in the planning for and financing of present (as well as future) health service resources and activities. Most of our past and present efforts have been concerned with developing isolated types of resources and services. The result is serious omissions and deficiencies with regard to health services for the aged and the chronically ill.

Therefore, it is now generally recognized that the greatest need in the area of the delivery of health care is for the development of a coordinated system of health services that is comprehensive in scope and that is planned and administered to tailor its responses to the individual older person's needs. This health care or health services system would require several essential ingredients: health manpower, health facilities, health financing, and a method of organization that attempts to arrange and coordinate these elements in the most efficient and effective way so as to improve the health of its constituents.

By health manpower is meant all those people essential to deliver and support the delivery of the types of services necessary to maintain or improve the present health level of the aged. This would include physicians, dentists, nurses, social workers, therapists, psychologists, podiatrists, technicians, health educators, health counselors, and religious workers—as well as nonprofessional aides, assistants, and community workers.

If the health needs of the elderly are to be met by any one or a combination of these trained people, there is a necessity for teamwork and communication between them. Also there is a need for each of them to acquire the attitudes, knowledge, and skills necessary to both successfully communicate with the elderly person and to understand, keep abreast of, and provide compassionate and effective management of his problems. In undergraduate, graduate, and continuing professional and nonprofessional education there is a need to give greater emphasis to the specifics of geriatrics and preventive medicine, as well as to the more inclusive concepts of comprehensive care for the entire patient, including how to utilize all of the available health resources in the community for the benefit of the elderly. There is also a need to inform the elderly person himself through individual or small group sessions and through the mass media, of the actions he can take to improve his own health.

By health facilities is meant the various settings where health services may be delivered, such as general hospitals, chronic disease hospitals, specialty hospitals, rehabilitation centers, extended care facilities, skilled nursing homes, intermediate care facilities, homes for the aged, foster homes, neighborhood health clinics, outpatient departments, physicians' offices, on-the-job clinics, mobile health units, and the homes of the elderly. There is a need for the people who provide services to the well or the sick aged to be sensitive to the benefits and disadvantages of delivering those services at different sites and to give serious consideration to the convenience of the elderly person and his family before making a final decision.

By health financing is meant funds to develop needed and appropriate manpower and facilities resources, to pay for and upgrade their services, and to support the health services research, evaluation, record keeping, and information processing activities that are essential for efficient and effective system operation. With regard to the health care of the aged there is a need for more funds and for the rational use of present funds to secure the improvements needed in their health status.

By organization is meant the arrangement and administration of the manpower, facilities, and financing, as well as the appropriate use of research, evaluation, and record keeping, in order to improve the decision making and operating characteristics of the system. There is a need for organization of the health care of the elderly in order to make the health manpower, facilities, services, and potential benefits physically available, continually and conveniently accessible with regard to distance and time of operation, personally acceptable, appropriate to the condition and the individual's level of need, qualitatively adequate, publicly accountable, and directly responsible for the planning of a continuum of primary, secondary, and tertiary levels of health care for the aged, either individually or collectively.

There is also a need to encourage various administrative mechanisms for flexibly organizing the essential health elements into a responsive system and to encourage organizational patterns appropriate to local, regional, and other differences. There is a need to actively promote those organizational forms, be they monolithic or multilithic, that can accomplish the aim of improving the health of the elderly.

D. REMOVAL OF SOCIO-ECONOMIC BARRIERS

There are at present places in the country where some of the services previously described as necessary are available and are delivered to elderly people. They are not "comprehensive" services in the true sense of the word, and they do not utilize all of the available health and social resources in the community in the most efficient way. Furthermore, it cannot be claimed that all of the elderly who might potentially benefit from these services actually do. There are factors outside of the health services system that serve as barriers to the elderly, that keep them from participating in and benefiting from the advantages that a health services system may have to offer, and that may also prevent them from avoiding some of its potential disadvantages. In order to insure that the health status of the elderly person is improved by the provision and delivery of health services that have been developed specifically for this purpose, *there is a fourth general need, and that is to eliminate the socio-economic barriers that interfere with the aged person's ability to get into the health services system and with his satisfactory use of and potential benefit from the services available in and delivered by that system.*

It has already been noted that the production of complete physical health is intimately related to mental and social health. Barriers to the achievement of both mental and social well-being may adversely affect one's physical health by impairing a timely entry into and successful passage through whatever arrangement of health services is available. The needs of the aged person for appropriate and sufficient nutrition, suitable and convenient transportation, satisfying and nonhazardous employment, productive and fulfilling retirement, broad-based social and health education, and spiritual well-being all have bearing on his physical health condition, just as his physical condition influences his ability to partake of what is presently and potentially available to him in these areas. Also on the social side of his well-being and also influencing his state of physical health, are the elderly person's satisfactions and experiences from his personal life, from his family life, from his cultural and societal group, from the physical and social environment in which he lives, and, more specifically, from his previous encounters with personal health services.

There is also a need for increased public concern for the health condition of the aged. Just as these broad socio-political interests focused in on and did eventually improve the health of infants and children from what it was decades ago, there is now a need for a similar show of socio-political concern and activity for the aged.

The elderly and especially those 65 years of age and over have enormous health needs but only limited personal resources with which to meet them.¹ At all family income levels (in a 1962 survey) the health expenses per person per year increased with advancing age, and those people 65 and over showed the greatest per capita health expenses (National Center for Health Statistics (NCHS), 1964b). In fiscal year 1969 the United States total public and private per capita personal health expenditure for people 65 and over was \$692. This was 2.5 times greater than the per capita expenditure for those 19-64 years old and 6.3 times greater than that for people under 19 years of age (U.S. Social Security Administration 1970).

¹ See the Background Paper on "Income," 1971 White House Conference on Aging.

After deduction of the premium payments by the aged for the supplementary medical insurance program, Part B of Medicare, the public share of expenditures for the personal health care of people 65 and over in fiscal 1969 was about 65 percent (Cooper, 1970). Medicare was a major step in the removal of part of the financial barrier that separates the elderly from receiving necessary and appropriate health services. However, the economics of life are such that Medicare paid for only about 40 percent of the personal health expenses of the aged in fiscal 1969 when Part B premiums are deducted. Public assistance (vendor medical payments, Medicaid) accounted for almost half of all the other public expenditures for care for the aged. But public coverage of medical care from various sources is not well coordinated; covered services are not complementary; and eligibility is not equal in all geographic areas.

Medicare coverage is not comprehensive. The most notable uncovered expenses are in the area of primary preventive services, prescription drugs, mental health benefits, custodial care in an intermediate care facility, and long-term institutional care with skilled nursing care for over 100 days. All these, as well as other services, are usually excluded from public and private health insurance benefits—to the detriment of the elderly.

If Medicare benefits were expanded in 1971 to cover the expenses of prescribing, fitting, and the cost of hearing aids and eyeglasses; dentures and the professional services related to them; all prescription drugs (with a \$1 deductible per prescription); a liberalized nursing home definition which includes intermediate as well as extended care, elimination of the Part A (hospital insurance) deductible and coinsurance; and elimination of the Part B \$50 deductible—it is estimated that the additional cost would be slightly more than the entire fiscal 1969 expenditure for Medicare of \$5.4 billion after the Part B premiums are subtracted (Social Security Administration, 1971).

The aged's increased health needs, their relatively poor general economic status; their burden of paying premiums, deductibles, and copayments for covered as well as uncovered services; the continuous rise in the price of health services; and the economic hardships of disabling chronic disease are all elements that contribute to the financial barrier that separates the aged individual from necessary care. Another factor that increases the economic burden of health care is the inefficiency in the way we currently run our health services. Reuther (1970) estimates that about 25 percent of the total United States health expenditure of about \$60 billion dollars in fiscal 1969 was inefficiently and unnecessarily spent.

There is a need to solve the problems created when an economic barrier exists between people and the services they sorely need. There is a need to develop financial mechanisms that can adequately pay for the development and maintenance of resources to provide necessary services and to develop better services. This mechanism (1) would have to allow for incentives to the providers of care to stress preventive and early diagnostic services, rather than the usual treatment at later stages in the disease process, (2) would have to organize and deliver personal health services in an efficient, economical way that is still compatible with a personal, responsive approach to the needs and problems of the aged, (3) would have to evaluate their activities and the impact of these on the health of the people they serve; and (4) would have to feed back the results of these evaluation studies in order to improve their present practices.

This mechanism would also need to provide incentives to the elderly to utilize medical care more effectively and to encourage them to adopt health-preserving behavior. There is an additional need for incentives for the general public to establish a rational, practical health policy for the elderly and continually evaluate and update it—since inevitably the cost of aged health care must be partially met by financial support from the young.

The aged do not suffer alone when we are ineffective in preventing or treating certain chronic illnesses, when we cannot deliver appropriate health services to those in need, when we

are not economical, or when we do not find the funds or an alternative mechanism to purchase needed services. The young also suffer, for they are bound to inherit these failures; but more importantly the entire country suffers, for it loses the full potential and participation of both generations.

The lack of adequate pre- or post-retirement income for some and of some form of adequate financial assistance for the non- or never-employed person also points to a pressing economic need. Just as many other social factors influence the development of or recovery from conditions that impair physical health, the lack of an adequate income impairs not only the direct or third party purchase of health services but also the purchase of an enjoyment of the other social necessities and amenities that are equally important to the physical quality of the lives of the aged and to their realization and enjoyment of physical health.

II. LONG-RANGE GOALS

A long-range goal, deeply imbedded in our value system is that all Americans should enjoy the best physical and mental health and social well-being that knowledge and technology can provide. This goal—stated implicitly or explicitly—underlies the enormous expenditures we make for medical research, training health manpower, and for support of a huge conglomerate of health and medical facilities, programs, and services. The goal becomes more compelling when we view it in the perspective of the older population beset with the involuntional changes we identify as the natural processes of aging, and with the inexorable increase in the prevalence of long-time illness and disability cumulated from long exposure to the numerous hazards of the environment. Thus, promotion of health and prevention and treatment of illness have become basic concerns of all older people and of most of those who have become professionally involved in the field of aging.

It is not surprising, therefore, that most conferences, committees, and commissions established to consider the well-being of older people have given high priority to the matter of health. Few such bodies have taken the trouble to reformulate concise statements of long-range goals, presumably because of the total societal acceptance of the generalized goal stated above. Instead, these groups have proceeded directly to the identification of plans for action and/or programs the implementation of which would enable us to move toward achievement of the common goal.

Nevertheless, goal statements have appeared several times in the literature on aging over the past few years. Participants in the first National Conference on Aging called by the Federal Security Agency (predecessor to the Department of Health, Education, and Welfare) in 1950 addressed their recommendations to specific measures designed to relieve the later years of the burdens of long-term illness, deterioration, and disabling conditions. Their report did proceed, however, from a brief statement of goals calling for the promotion of positive health (viewing health as comprising physical, emotional, intellectual, and social well-being); the prevention of premature disability; and the provision of treatment and care—therapeutic, rehabilitative, and palliative—for the aging sick and disabled (U.S. Federal Security Agency, 1951, p. 104).

In 1952, President Truman's Commission on Health Needs of the Nation called for a "bold attack" on chronic disease and recommended several implementing measures aimed at increasing health services, research, professional education, and payment mechanisms (President's Commission on Health Needs of the Nation, 1952, pp. 72-73).

Three years later, the Council of State Governments (1955) published "A Bill of Objectives for Older People." "The objectives," the Council stated, "surely, would accord with the rights and privileges to which older people are entitled as human beings and American Citizens" (p. xi). Two of the long-range goals or objectives states that:

Older adults should have adequate nutrition, preventive medicine and medical care adapted to the conditions of their years.

Older persons who are chronically ill, physically disabled, mentally disturbed, or unemployed for other reasons, have a right, to the fullest extent possible to be restored to independent, useful lives in their homes and communities (p. xi).

A report to the Surgeon General by the Public Health Service Task Force on Aging recommended that "The Public Health Service must assert as its goal A HEALTHY OLD AGE FOR EVERY AMERICAN" (U.S. Public Health Service, 1964). Numerous recommendations flowing from expressed or implied goals are found in reports and proceedings of the Federal-State Conference on Aging in 1956 (Council of State Governments and Federal Council on Aging 1957); *The Nation and Its Older People*, a report of the 1961 White House Conference on Aging (U.S. Department of Health, Education, and Welfare 1961); and reports of the U.S. Senate Special Committee on Aging (1969 and 1970) and the Presidential Task Force on Aging (1970).

One of the clearest expositions of long-range health goals for older people was contained in Title I of the Older Americans Act (U.S. Department of Health, Education, and Welfare, 1970a). Four long-range objectives addressed to improving the health of the older population were:

The best possible physical and mental health which science can make available and without regard to economic status.

Full restorative services for those who require institutional care.

Retirement in health, honor, dignity—after years of contribution to the economy.

Immediate benefit from proven research knowledge which can sustain and improve health and happiness.

Proclaiming Senior Citizens Month (1970), President Nixon—recognizing long-range health goals said, "For too long we have lacked a national policy and commitment to provide adequate services and opportunities for older people." The foregoing review of health goals, taken with President Nixon's call for action, clearly underlines the theme of the 1971 White House Conference on Aging—*Toward A National Policy for Aging*.

III. KNOWLEDGE AVAILABLE

A. HEALTH DATA

Of the almost 202 million people estimated as residents in the United States in 1969, about 41 million, or 21 percent, were between 45 and 64 years, and about 19 million, or 10 percent were 65 years old or older. The percentage of people in the United States who are 45 and over has been increasing, and the major portion of this increase is due to the population that is 65 and over (See Table 1.). A continuation of this trend is expected in the future.

In the latest broad survey of institutions for the aged and chronically ill, which included long-stay geriatric and chronic disease hospitals, chronic disease wards and nursing home units of general hospitals, nursing homes, convalescent homes, and homes for the aged, 501,612 persons or about 88 percent of the residents were 65 years of age or older. These aged residents comprised about 2.9 percent of the total U.S. population over 65 years of age (NCHS, 1965a). Therefore, about 97 percent of the elderly live in the community.

TABLE 1--RESIDENT POPULATION OF THE UNITED STATES, 1950-69
In Thousands

Year	Age Group				
	All Ages	45-64		65 and Over	
	Number	Number	Percent	Number	Percent
1950	150,697	30,712	20.3	12,195	8.1
1960	179,323	36,058	20.1	16,560	9.2
1967	197,859	40,198	20.3	18,804	9.5
1969	201,921	41,366	20.5	19,470	9.6

Sources: Grove, R. D. and Hetzel, A. M., Vital Statistics Rates in the United States, 1940-1960. Public Health Service Publication No. 1677, Washington, D. C.; U. S. Government Printing Office, 1968; U. S. Bureau of the Census, Estimates of the Population of the United States by Age, Race, and Sex: July 1, 1967 to July 1, 1969. Current Population Reports, Series P-25, No. 441. Washington, D. C.: U. S. Government Printing Office, 1970.

The physical health needs of the elderly are best delineated after understanding their present state of health. Information on the aged and their physical health status comes from various sources: the census; mortality reports; health interview surveys; surveys of institutions and providers of care; health examination surveys; and morbidity and hospitalization data. At this writing, 1967 was the latest year for which national statistics on the dimensions of both mortality and morbidity of the elderly were available. Moreover, there are no generally accepted measures or indices of health in the positive sense indicated by the World Health

Organization. Therefore, the dimensions by which the physical health of the elderly will be described here reflect, for the most part, only the presence or absence of impaired health and not indices of well-being.

1. Life Expectancy

The increase in the proportion of the population 65 and over is partially due to an increase in the average remaining years of life or the average life expectancy at birth. However, the rate of increase in the life expectancy of the elderly has been much less than that for younger age groups (See Table 2.). Elderly males have a lower life expectancy at the same age than females, and whites, in general, have a more favorable experience than nonwhites.

TABLE 2—AVERAGE LIFE EXPECTANCY IN THE UNITED STATES, 1930-67

Year	Estimated Average Number of Years of Life Remaining ^a		
	At Birth	At Age 45	At Age 65
1929-31	59.2	25.8	12.2
1959-61	69.9	29.5	14.4
1967	70.5	29.9	14.8

Sources: U. S. Department of Health, Education, and Welfare, Trends, 1966-67 Edition, Part I, National Trends. Washington, D. C.: U. S. Government Printing Office, 1968; U. S. Bureau of the Census, Statistical Abstract of the United States: 1969. Washington, D. C.: U. S. Government Printing Office, 1969.

^aBoth sexes.

The marked increase in the average life expectancy at birth is probably due to an improvement in public health practices, an increase in medical knowledge, and progress in industrialization. Dr. Allman, a past president of the American Medical Association, said in 1957, "The most important single factor facing the medical profession today, is the care of the aged. Medicine is largely responsible for the increasing number of people over 65, so we must solve the medical and help solve the economic problems which result" (Van Zonneveld, 1961).

2. Longevity

While there have been major gains in the average life expectancy at birth and only a minor increase in the life expectancy in the later years of life, as at age 65, there has been no documented increase in man's longevity or in the greatest number of years that a human being can live. The oldest living Social Security beneficiary is Charlie Smith of Bartow, Florida, who was 128 years old on July 4, 1970. Mr. Smith is probably the oldest man alive in the United States, and his longevity challenges the world record of a French-Canadian man for the longest "authenticated" life span of 113 years, 124 days (McWhirter and McWhirter, 1968). While there are presently 4,574 centenarians receiving benefits from Social Security in the United States, these are the exceptions rather than the rule, for very few people survive over 100 years (Dublin, 1965). Sachuk (1970) feels that "if there is to be further increase of population longevity, considerable effort will be needed to improve both medico-hygienic service and

population living conditions. It is a great challenge to gerontological science, and social gerontology in particular."

3. Mortality

The United States general mortality rate, or deaths from all causes, has decreased from 11.3 deaths per 1000 population in 1930 to 9.4 in 1967, but much of this decrease occurred prior to 1950 when the rate was 9.6. The number of people dying at different age intervals may be expressed by age-specific death rates.

The greatest reduction in age-specific death rates has been in the first several years of life, with a relatively smaller improvement for those in the older age groups (See Table 3.). In 1967 in the age groups above 44 years males experienced higher mortality rates than females, in general, both in the white and nonwhite groups. Whites experienced lower mortality rates from 45-74 years of age than nonwhites, and the lower rates for nonwhites from 75 years and over may be due to inadequate reporting of nonwhite deaths in this group (NCHS, 1969a).

TABLE 3—GENERAL MORTALITY RATES IN THE UNITED STATES, 1930-67^a

Year	Age Group						
	All Ages	Less than 1 year	45-54	55-64	65-74	75-84	85 and over
1930	11.3	69.0	12.2	24.0	51.4	112.7	228.0
1950	9.6	33.0	8.5	19.0	41.0	93.3	202.0
1967	9.4	22.3	7.3	16.7	37.5	79.0	194.2

Source: U. S. Bureau of the Census. Statistical Abstract of the United States, 1969. Washington, D. C.: U. S. Government Printing Office, 1969, p. 55.

^aDeath rates from all causes per 1,000 population in each age group, both sexes.

In 1967 the three leading causes of death for the entire United States population were the same as the three leading causes of death for those over 44 years of age. The greatest percentage of all deaths in the United States was caused by diseases of the heart (39.0 percent); second was cancer, or malignant neoplasms (16.8 percent); third was strokes, or vascular lesions affecting the central nervous system (10.9 percent) (NCHS, 1969a). While there has been little change since 1958 in the general death rate in the United States for diseases of the heart and perhaps a slight decline in stroke mortality, there has been a rise in the death rate from cancer (NCHS, 1969a).

For diseases of the heart in 1967 the death rate for those of 45-54 years of age and those of 65-74 years of age was, respectively, 3.5 and 23 times the death rate experienced by the 35-44 year age group (NCHS, 1969a). In 1967 almost 700,000 people over age 44 died from diseases of the heart. This represented 97 percent of all heart disease deaths. About 92 percent of the deaths from cancer and 97 percent of the deaths from vascular lesions affecting the central nervous system occurred in people over 44 years of age (NCHS, 1970a).

4. Morbidity

Almost all of the national data on morbidity and on the disability resulting from that morbidity has been obtained through the National Health Survey, a continuous study of the

health of the United States population conducted by the National Center for Health Statistics. Most of the following estimates were made from data collected by sampling in the household interview section of the National Health Survey of the noninstitutionalized population of the United States.

4.1. Acute Conditions.

For the survey acute conditions are defined and grouped as: certain infective and parasitic diseases, respiratory conditions, digestive system conditions, injuries, and certain other departures from well-being that lasted less than three months and either resulted in restricted activity or involved some sort of medical attention. Therefore, acute conditions that did not result in restricted activity or medical attention would not be included in these statistics.

During the calendar year 1967 it was estimated that 68.5 million acute illnesses and injuries occurred among the 57.6 million total estimated civilian, noninstitutionalized population of 45 years of age and over. This estimate represents an average of about 1.2 acute conditions per person in this age bracket per year (NCHS, 1969b). While the number and the rate of acute illnesses for calendar 1967 are slightly greater than for fiscal 1967, they are much less than the number and rate (1.5 per person) recorded in fiscal year 1963, even though acute conditions have decreased for all ages since then (NCHS, 1964a). People 45 years of age and older report fewer acute conditions per person per year than all other age groups. Males 45 years and older report fewer acute conditions per person per year than females of similar age (NCHS, 1969b).

4.2. Injuries.

The rate of injuries per year as recorded over fiscal year 1966 and 1967 in people 45 years and older was less than that at younger ages. Among all people 45 and over, contusions or bruises were the leading type of injury. That condition along with lacerations and abrasions, sprains and strains not including the back, and fractures and dislocations excluding the skull accounted for about 75 percent of the injuries in this age group (NCHS 1969c). During 1967 an estimated 11.4 million people 45 years and over were injured, about 5 million of them at home (NCHS, 1969b). Both of these figures are slightly larger than during fiscal year 1967.

4.3. Chronic Conditions.

In the National Health Interview Survey chronic conditions refer to either specific chronic diseases, such as high blood pressure, diabetes, and rupture; impairments that represent a decrease or loss of ability to perform certain functions, such as might occur with the musculo-skeletal system and with the sense organs; or conditions first noted more than three months before the interview week.

The percentage of the total civilian, noninstitutionalized United States population with one or more chronic conditions has increased from 41.4 percent in fiscal 1958 to 49.9 percent in fiscal year 1967. However, this increase may be due to an effort to obtain better reporting in the survey rather than an increase in the prevalence of the chronic conditions. During fiscal year 1967 about 15.4 million, or 86 percent, of people 65 and over and 28 million, or 71.6 percent, of those 45-64 years of age were estimated to have one or more chronic conditions. Fully three quarters of the total population over 44 had one or more chronic conditions.

While those over 44 comprised less than 30 percent of the total population, they formed over 45 percent of the people with at least one chronic condition (NCHS, 1968a; NCHS, 1968b).

The number of selected chronic conditions was reported in interviews during fiscal 1964 and 1965. While orthopedic impairments and digestive conditions ranked first and second in number for the age group under 45 years, arthritis and rheumatism preceded those two for the 45-64 year age group, and arthritis and rheumatism, hearing impairments, and digestive disorders, in that order, were the three largest in number reported for the age group 65 years and over (NCHS, 1966).

4.4. Dental Conditions.

During 1960-62, on the basis of sampling only adults who had one or more natural teeth, of those adults 18-79 years of age who were classed by the examiner as "should see dentist at early date," about 39 percent were between the ages 45 and 79 (NCHS, 1970b). The periodontal index rises steadily with age, and both men and women in groups from 45-79 years of age had a greater prevalence and severity of periodontal disease than the average for all adults aged 18-79 in their sex (NCHS, 1965b). The average number of decayed, missing, and filled (DMF) teeth increases with age for both sexes, indicating that the lifetime toll of dental disease and the permanent dentition of the elderly is great (NCHS, 1965b).

5. Disability

In calendar 1967 people of age 45 and older had more days of disability per person per year, either in terms of work-loss days, restricted activity days (days with a substantial reduction of normal activity), and bed-disability days (days in which one stays in bed all or most of the day or occupies a hospital bed), than any other age group. In each of these categories the rate of disability days was greater for those people 45 years of age and over than the average for all ages, and the rates for restricted activity days and bed-disability days for this age group were more than twice the average rate for the total United States noninstitutionalized population (NCHS, 1969b).

The total days of disability per person 45-64 years of age, which combines restricted activity days, bed-disability days, and work-loss days, was 34.5 for calendar 1967 and was essentially unchanged from fiscal 1967, as was the average of 26.4 for all ages. However, the total rate for those age 65 and over increased about 8 percent from fiscal 1967 to 57.6 days of disability per person per year—that is, on the average, each person in this age group was disabled about two months of the year. Within the age group of 65 and over, males experienced 50.3 total days of disability per person per year while females had 58.3 (NCHS, 1969b).

The number of disability days reported per person per year during fiscal 1964 and 1965 regularly decreased as family income increased. This general relationship was also evident for those under, as well as over, 45 years of age for the number of restricted activity days per person, the number of work-loss days per person among the currently employed, and the number of bed-disability days per person—except for reversals in all three disability day categories in the \$10,000 and over category for people 65 and over (NCHS, 1966). The strength of this inverse relationship between economic status and disability due to illness and injury leaves little doubt that the relationship is causal (NCHS, 1966).

5.1. Acute Conditions.

People aged 45 and over reported fewer acute conditions per person per year in calendar 1967 than all other age groups. They also experienced both fewer days of bed disability per person per year than all other age groups and fewer days lost from work per currently employed person per year than other people over 16 years of age as a result of these acute conditions (NCHS, 1969b). Despite these facts people aged 45 and over had a greater rate of days of restricted activity per person per year from acute conditions than all other people except those less than 6 years of age (NCHS, 1969b). The total average number of days of disability from acute conditions per person 45 years and over per year in calendar 1967 was estimated at about 13.7, of which over 50 percent was due to restricted activity days.

5.2. Injuries.

While there were fewer accidents and a smaller number of persons injured per 100 persons in the age group 65 and over per year than in the group 45-64, and fewer in the latter group than in any other age category, the age group 65 and over reported the highest, and the age group 45-64 the second highest number of days of restricted activity from injuries or accidents per 100 persons for calendar 1967.

Although the rate of people 65 and over who were injured in calendar 1967 was less than 60 percent of the national average for all ages, those injured reported more than twice the national average of days of restricted activity per person from these injuries (NCHS, 1969b). Almost one half of these restricted activity days were due to accidents in the home (298.4), a rate that is three times higher than the United States average for that class of accidents. As age increases, the days of restricted activity per person due to accidents or injuries in the home also increases.

The rate of days of bed disability per 100 persons per year associated with injuries follows a similar pattern; it is highest in those 65 and over (over twice the United States average), with accidents in the home accounting for about half of these restricted days and with these home accidents being four times more than the national average for all ages. The average number of disability days per person 65 and over, due to all classes of injuries in calendar 1967, excluding days lost from work, was about 7.8, or about twice the national average per person (NCHS, 1969b).

5.3. Chronic Conditions.

For the total United States population from 1957-67 along with the recorded increase in the percentage of persons of all ages with one or more chronic conditions, there was an increase in the percentage of people with no limitation of activity from their chronic conditions from 31 percent to 38 percent; a slight increase in the percentage of those with activity limitation, but not in a major activity; and an increase in the percentage of those with some limitation in their major activity (as in their ability to work, keep house, or engage in school or pre-school activities) from 7.3 percent to 8.7 percent (NCHS, 1968b; NCHS, 1969b). These longitudinal increases may be due to efforts to obtain better survey reporting rather than to any natural increase.

However, if one looks at one point in time, as in 1967, there is a marked difference in the degree of disability associated with chronic conditions between the aged and other age groups. In calendar 1967 while only 11.5 percent of the total civilian, noninstitutionalized

population and only about 5 percent of those people under 45 years of age reported any activity limitation due to chronic conditions, 18.9 percent of those people 45-64 years of age and 46.3 percent, or 8.3 million people, over 64 years of age reported some limitation of activity due to these conditions. While only 3 percent of people under 44 years of age had any limitation in major activities from chronic conditions in calendar 1967, 22 percent of the people 45 and over had this type of limitation. Moreover, almost 87 percent, or 7.2 million, of those people over 64 years of age with some activity limitation reported a limitation in their major activity, compared to 62 percent of those under 44 years of age (NCHS, 1969b).

Although in fiscal 1966 the percentage of people of all ages with one or more chronic conditions with family incomes under \$3,000 was 60 percent while the percentage with family incomes of \$10,000 and over was 49 percent, there is no clear relationship between the level of family income and the percentage of people with chronic conditions in different age groups (NCHS, 1968b). However, the level of family income appears to be inversely proportional to the amount of disability (or disability days) associated with chronic conditions as well as with the type of disability.

As the level of family income increases, the percentage of people with one or more chronic conditions without activity limitation from those conditions increases while the percentage with any form of activity limitation generally decreases. In fiscal year 1966 for the age groups of 45-64 years and 65 years and over, there was a greater percentage of people with one or more chronic conditions with limitation in the amount or kind of major activity and with inability to carry on their major activity in the under \$3,000 family income category than in the \$10,000 and above category (NCHS, 1968b).

During fiscal years 1964 and 1965 selected major chronic conditions were reported in interviews of both sexes (NCHS, 1966). Although the greatest number of conditions reported in the 45-64 year age group was for arthritis and rheumatism, only 22 percent of those caused activity limitation. While the smallest number of conditions reported was for strokes, 65 percent of these, the greatest percentage for a particular disease category, caused activity limitation.

Strokes also accounted for the smallest number of conditions reported for the age group 65 and over and for the greatest percentage (70 percent) of conditions causing activity limitation in a specific disease category for this group. Arthritis and rheumatism accounted for the greatest number of selected chronic conditions reported in the age group over 64, but only 32 percent of these conditions caused activity limitation. In both the 45-64 years and the 65 years and over age groups diseases of the heart had the second greatest percentage of conditions causing activity limitation, about 61 percent and 64 percent, respectively.

6. Other Indicators

The statistics on death, disease, and disability measure only the quantitative aspects of health impairment, and unless they are further qualified by cause, they do not reflect the mental or social dimensions of this impairment. The concepts of discomfort, dissatisfaction, and social disruption, as defined by some, are means of accounting for these nonphysical dimensions. However, there is no general agreement on the conceptual and operational definitions of these terms and national measurements for them are lacking.

There are also no generally accepted indexes that reflect both the combined qualitative and quantitative, as well as the positive and negative aspects of physical, mental, and social well-being. In short, we have no comprehensive measures of health or the quality of life in the World Health Organization sense.

Although we can adequately measure, at present, only the more traditional dimensions of physical health impairment, such as death, disease, and disability, we should remember, when decisions are to be made for action in the health field, to reflect upon the personal elements—the individual suffering and anguish—that always accompany these statistics.

B. BIOMEDICAL KNOWLEDGE

Aging has not been easy to define, but in simple terms it can be said to be the sum total of changes that occur throughout the life of an individual that are not attributable to accident or disease. On the other hand "aged" or "senescent" are more specific descriptive terms and may be regarded as applying to those people in whom degenerative changes have occurred after maturity has been reached and who may ultimately die as a result. There are many theories on the causation and/or the acceleration of aging, none of which are accepted by everyone. Generally, these fall into three classes: (1) those that have to do with the inherited failure of elements in the organism itself; (2) those attributable to environmental factors, including disease and injury; and (3) those that relate the speed of degenerative changes inherent in vital cells to the extraneous effects of the environment, including emotional or stress factors, that trigger and accelerate the underlying degenerative process.

The aged human is usually easily recognized by the appearance of his skin and hair, his reduced speed and poverty of movement, the character of his gait, his posture, often his speech, and a degree of loss of vigor and vitality. These are reflections of changes in structure and function of various organs of the body and their component parts. Particularly affected are the muscular system, the skeletal system, and the central nervous system. These organ systems are vulnerable to time-related loss of cellular substance without replacement and thereby are subject to changes in function. There are many known and suspected biological changes related to aging, among the most important of which is loss of cellular mass in certain body organs and changes in the supporting connective tissues of the body. The principal substance in connective tissue is the protein material collagen, and the time-related changes in many organs, including the skin and blood vessels, are thought to be related to its changes.

The most characteristic physiological manifestation of aging is the progressive diminution of ability of the individual to withstand stress. Stress may be an accident, disease, or a severe psychosocial event; but whatever it is, the older individual copes with it less easily than does the young. This loss of ability to readily adapt to stress can also be demonstrated in several ways by responses to specific physiological tests. Thus, aging may be viewed as an invitation for the advent of accident or disease, for the older person is likely to be more susceptible to infection and other stresses. A particular condition that may have only trivial consequences in the young can result in serious illness or death in the old.

Most biological knowledge currently available about aging is fragmented and has not been integrated into a cohesive theory. There is a lack of information about the relationship between the central nervous system, endocrine balance, physiological abnormalities, and cell degeneration.

During his lifetime the elderly person shows not only the erosive effects of time-related anatomical and physiological changes but also the accumulated residue of major onslaughts of trauma, physical disease, and mental stress. The aged host, thus conditioned quantitatively and qualitatively, has physical reactions different from those of younger people. Even when not beset with illness and to all outward appearances in good health, the aged person is slowed down in many ways physiologically and is therefore without the physical vigor of youth.

Although the same disease states occur in all age groups, the nature of the aged host and his particular reactions to disease and illness make him stand out as a special problem for medical management. Chronic disease with long-term illness and disability comprises the bulk of the serious physical health problems of the elderly and a multiplicity of these ailments is common in the same individual. It is well known that the aged require health services in a far greater proportion than do younger people. They need more frequent hospital admissions, stay longer in the hospital, are prime users of long-term care facilities and home health agencies, consume more drugs, and require more physician time.

Finally, knowledge of the etiology and natural history of the chronic degenerative diseases is extremely scanty. Although these conditions are of overriding importance in the health of the aged person, vital information about them is lacking.

C. PSYCHOLOGICAL KNOWLEDGE

There is ample reason to think that the central nervous system, which comprises the body's great communication network, reflects not only disease but aging. There is evidence that it may serve as the pacemaker and/or central indicator in the processes of aging. With time-related death of the nerve cell (neuron), which is not capable of reduplication, integration of various functions of the body is impaired.

With aging there is reduction in acuity in the special senses—vision, hearing, taste, smell, touch, and balance. There is slowing down in the rapidity of response and ability to handle complex activities and unfamiliar tasks. These reductions in sensation do not necessarily adversely affect behavior because most stimuli are usually above the threshold of perception and also because of corrective devices, such as eye glasses and hearing aids.

Though psychomotor skills may be reduced, older people often show superiority in tests on information, comprehension, and verbalization. Learning ability and receptivity toward new ideas have been shown not to be age-related; the level of education seems to be the determining factor in the latter. There is some evidence that thought processes of the older person tend toward associations rather than analysis.

But the most important aspect of knowledge of psychological influences on physical health is the association of mental with somatic illness. Infection, malnutrition, heart failure, and other abnormal physical states are known to be associated with mental illness. Emotional states and response patterns are frequently associated with and attributable to somatic disease of the central nervous system or elsewhere. Recent information suggests that personality patterns in early life may be related to the development of cardio-vascular disease later on.

Other areas in which new attitudinal knowledge is commencing to emerge include the effects of bereavement on mental and physical health and the special problems faced by health practitioners with regard to patients who are approaching death.

D. SOCIOLOGICAL KNOWLEDGE

The age of 65 years as a dividing line between the "old" and "not old" is an arbitrary distinction conditioned by the national acceptance of that age level as suitable for retirement. When a person becomes "old" actually depends upon the role he performs in society—as witnessed by the professional football player in contrast with a symphony orchestra conductor. The retirement age of 65 is a social rather than a biological determination.

It is well known that the influence of changing one's pattern of living and one's method of earning a living may have a considerable effect on physical and mental health. Not only may

retired people be forced to drastically reduce their standard of living, but this is often accompanied by a sense of self-degradation. The ability to purchase health services may be seriously jeopardized with consequent disastrous effects. Even though he may be physically vigorous, an elderly person may curtail certain activities that cost money, abandon his social contacts, and in so doing, his expectations may drop. Other socio-economic factors, such as the influence of housing, recreation, and nutrition, likewise may determine the difference between good and bad health.

E. MEETING THE NEED FOR IMPROVING HEALTH

Needs of the elderly are determined by the various factors that influence their health, and the knowledge that is available about effective ways of influencing these factors varies. Within each of the health professions a large store of relevant knowledge is possessed by its members, but the ability to apply this to specific needs is sometimes seriously lacking. Many barriers stand in the way of applying present knowledge and some of these will be identified. However, there is also a need for new knowledge, gained both from investigations of the inter-relationship of the various physical, mental, and social factors that influence health and also from research into ways to improve the provision and delivery of health services and to remove the individual and social barriers that impede this delivery.

To meet the need for improvement of the health of older persons, the physician, for instance, has a lot of knowledge about the pathological and clinical aspects of disease and its treatment. But the health of persons in this age group is more than that—for there are other aspects of disease and sickness that influence morbidity, mortality, disability, dissatisfaction, and social disruption that are not met by knowledge solely of pathology and clinical syndromes. Some of these aspects involve the well known high prevalence of multiple diseases and illnesses occurring simultaneously in the same elderly person. There is also the parallel development of psychological and socio-economic problems along with physical illness, and important interactions occurring between them. Though each of these aspects of impaired health may be separately addressed by an appropriate professional, there is not yet available the knowledge of how to effectively piece together these fragmented contributions, or bits of knowledge, into an all inclusive program; the lack of knowledge is more a matter of *how* than of *what*.

F. "WELLNESS" AND THE PREVENTION OF ILLNESS

Despite ailments of one sort or another, the state of health of most elderly people does not require them to live in an institutional setting; rather it permits them to remain functional in the community. But despite this functional "wellness" in many old people there is a high incidence of chronic physical disease, which often leads to acute and/or long-term illness. Most chronic diseases have their beginnings in middle life or before, and the minimization of much illness in aged people is dependent upon the detection of these diseases as early as possible. At least some diseases are susceptible to early detection in the asymptomatic person, and by so doing the opportunity may be provided to institute measures to correct abnormalities and prevent or postpone major chronic illness.

The mechanisms for periodic physical appraisal of the older person for the purpose of detecting hidden disease are becoming increasingly well established, although the results of their effectiveness on morbidity and mortality continues to be in doubt. In recent years a body of experience relating to the utilization of modern technology in automated multiphasic health testing has been accumulating. Such automated and semi-automated testing with use of modern

laboratory methods, data processing, and computer technology makes possible a large scale testing operation that is cheaper, quicker, and more accurate than conventional methods. The more traditional methods to bring about early identification of disease are health education and counseling and the periodic physical and laboratory examination. It is presumed that use of a combination of these automated and traditional mechanisms would yield optimum results.

In addition to physical appraisal a great deal is known about the modalities of psychological and social appraisal, and there is much to be gained from the translation of this knowledge into preventive health measures. Moreover, the interaction of these several facets of health is not sufficiently documented; therefore, use of this other knowledge as an ingredient for meeting the need for continuing "wellness" is essential. The most effective and efficient procedures to coordinate this knowledge are still to be developed.

G. ILLNESS, ITS TREATMENT AND CARE

Under the present circumstances a very great many sick older people receive something short of the best treatment and care. Despite the economic support for medical and institutional care coming from the Medicare provisions, there remains the problem of getting high quality professional services to large numbers of older people and, in turn, getting the people to where good care can be provided. Much of this is attributable to the existing "system."

There is no lack of knowledge about effective ways of meeting the needs of the acutely ill older person. Health care in this country has been largely oriented to the crisis aspects of health. The acute general hospital has received most of our attention, and as a result that institution is generally of high quality. In acute illness situations where the hospital is not needed or used, there may be serious impediments to getting the results of knowledge to the sick person. However, meeting the health needs of the chronically ill older person is another matter. It is quite clear that many barriers exist to prevent effective provision of services to meet the needs of this type of patient. Clear identification of these barriers and their correction are urgently needed.

It is also essential that there be open and free communication between patient and professional and between professionals of various disciplines and subdisciplines. Very often there is difficulty in communication brought on by deficits on the part of the older person in mental ability, vision, hearing, and speech. Cultural differences—including race—are also sometimes prejudicial to good communication, and much is often left unsaid, which may be as injurious as what is sometimes said.

H. LACK OF COORDINATION AND GUIDANCE

In addition to poor communication there is virtually no coordination and guidance. It is difficult enough for the youthful person sometimes to understand the best ways to use the present "system," but for the somewhat confused, solitary, and sick older person any understanding may be thoroughly impossible. Even remembering times of the day and night at which services are available may be an imponderable obstacle. It goes without saying that all too often such services are given at a time and place and in a way more convenient to the provider than to the consumer.

I. TRANSPORTATION²

Another important barrier can be the distance between the old person and health resources. Older people in both rural and urban settings are often physically removed from the sources of services, both in terms of facilities and personnel. Transportation to and from such services is expensive and often hard to come by, and continuing to suffer with a health problem is often the easiest way out for the sick person. Once the services are reached, they are more often than not fragmented and depersonalized, the older person being sent from one individual or place to another without adequate overall control or supervision.

J. FINANCIAL RESOURCES

A very important barrier is the financial resources of the older person as compared to the level of health care costs. The inflationary spiral of prices that has taken place in the past decade has drastically caught health care costs into its mesh. This rise in fees for health services has been the subject of much inquiry and analysis, for it directly influences the quality and quantity of health services that can be purchased by the general population and, most particularly, by individuals who live below the poverty level. Approximately one-fourth of the elderly fall into this group, and their inability to purchase services directly affects any response that can be made to their needs. There is, therefore, a two-pronged problem—the rise of costs in health services and the effect of the rise on the poor.

The price of medical services for all age groups has risen faster than the prices of other consumer goods and services. The percentage of the gross national product spent on health has risen from 4.6 percent in 1950 to 6.7 percent in 1969, and total expenditures for health have risen from \$12.1 billion in 1950 to \$60.3 billion in 1969.

Since 1966 when Medicare benefits first became available, many elderly people have been helped toward meeting a large part of the costs of their health care. However, Medicare was never intended to meet all health service costs, and experience has shown that it has done even less than was expected. With respect to medical insurance Part B costs, there is the \$5.30 monthly premium for supplementary medical insurance, the \$50 deductible item, and the payment of 20 percent of the remainder of the physician's fee. Under Part A hospital insurance, effective January 1, 1971, the patient pays the first \$60 for the first 60 days in the hospital and \$15 for each day of the remainder through the 90th day; he also pays \$7.50 for each day of the 21st through the 100th day in an extended care facility. In short, Medicare meets only 40 percent of the health care costs of the elderly.

The expenses it does not cover can be a great burden for the poor or the very sick. There is little doubt that these costs result in the failure of many older individuals to seek out health services, and therefore act as a barrier to optimal health. Among the costs not covered are such items as prescription drugs, eye glasses, and hearing aids. Perhaps even more serious are vital elements of health care not covered by Medicare at all. Principal among these are "custodial care"—that is, long-term nursing home care (not posthospital extended care)—care in an intermediate care facility, and care in hospitals and extended care facilities beyond the number of days covered. Costs of such institutional usage can be catastrophic. *There is also no provision for routine physical examinations and certain other preventive health services*

² For additional discussion of this subject see the Background Paper on "Transportation," 1971 White House Conference on Aging.

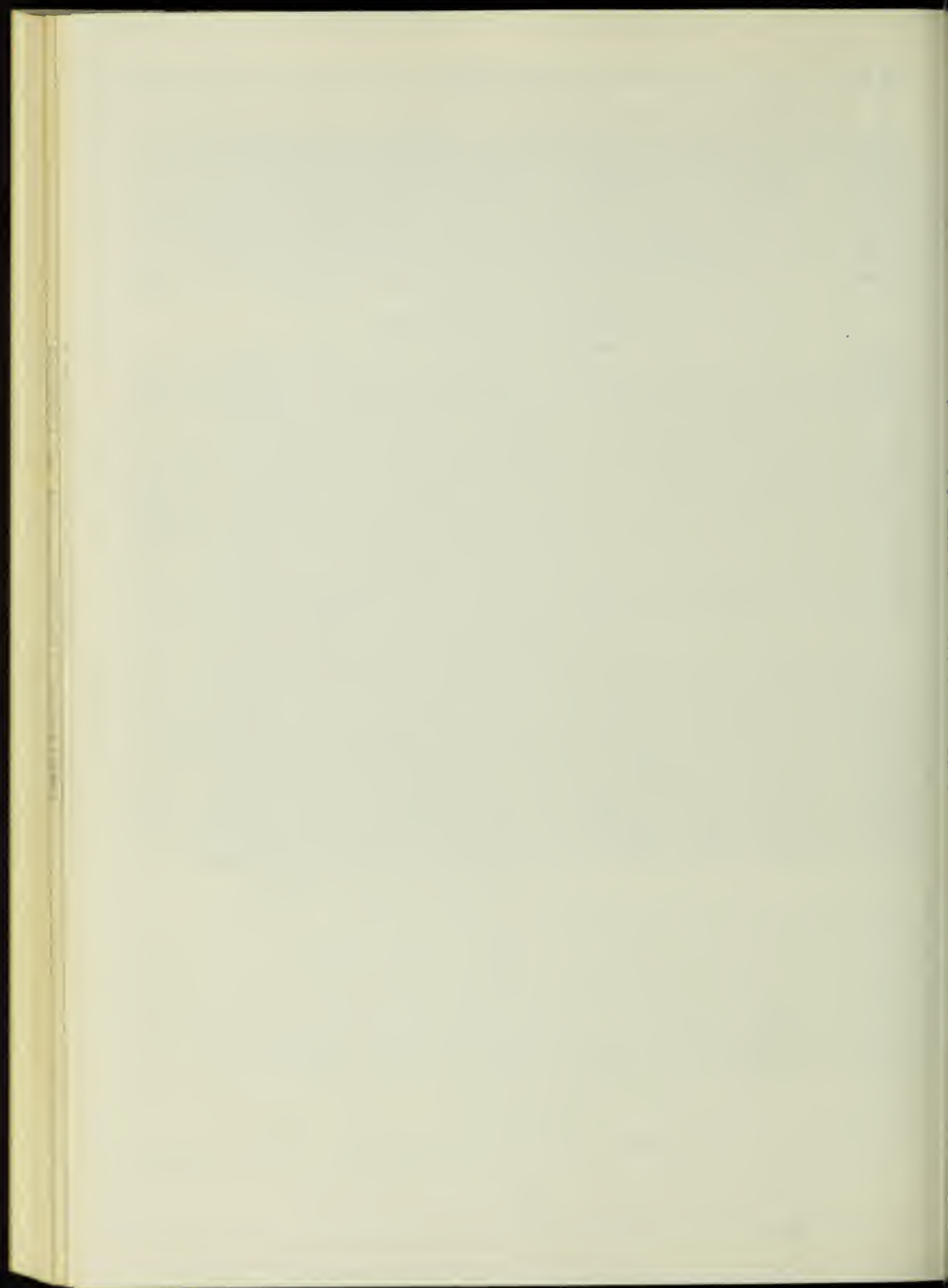
that might be greatly influential for many elderly people in avoiding illness and institutionalization.

The Medicaid program was anticipated to be of special importance to the elderly low-income group. The services to be provided under this Federal-State health care plan, however, are largely at the discretion of the individual States, and there is wide diversity of eligibility for assistance. Eligibility requirements vary, and in some areas the definition of "medically indigent" is extremely restrictive. Benefits similarly show great variance. The Medicaid program has been widely criticized and is accused of being an "administrative monstrosity" and neither a health nor medical care program but rather a payment program for a limited number of medical services. Moreover, there has been little effect from the small efforts in some States to incorporate quality control into the Medicaid programs.

The many fiscal pitfalls relating to the provision of health services for the elderly are most keenly felt by the poor. Generally speaking, the affluent can gain access to services through the medium of monetary resources. On the other hand the poor or near poor have monetary problems that serve as a barrier to meeting their health needs. They continue to bear the burden of poor health. In other words, the curse of the poor is their poverty.

The status of the present health manpower pool also constitutes a serious barrier to effectively meeting the needs of the aged. It is almost universally regarded as inadequate to meet the national health needs and, in particular, the needs of the elderly. There are insufficient numbers of physicians, dentists, nurses, social workers, therapists, psychologists, nutritionists, and podiatrists to meet the overall health requirements of the nation. In the case of the elderly, moreover, a lack of motivated interest in and knowledge about their health care on the part of many health professionals serves as an additional deterrent. This lack of interest has been borne out repeatedly by studies on attitudes of various professional groups. Thus, the elderly population with its poor economic position and its many and complicated physical, psychological, and social problems is at the forefront of the disadvantaged.

The quality of care provided by the long-term care facility, which has been the recipient of considerable attention in recent years, can also serve as a barrier in meeting the needs of the aged. Though there are outstanding exceptions, there seems to be little doubt but that in great numbers of these institutions there are serious deficits related to the quantity and quality of nursing personnel, sketchy rehabilitation services, poor nutritional standards, lack of availability to minority groups, excessive costs, and poor physical plants. Increasing attention is being given to the problems of long-term care by Congressional committees and Federal, State, and local agencies as well as by concerned consumer groups, some formed specifically for this purpose. Resolution of the problems revolving around long-term care is urgently needed.



IV. THE PRESENT SITUATION

The decade 1960-1970 was one of turmoil in both the public and private sectors with regard to the provision and delivery of medical and related health services. The beginning of the decade saw a major effort, supported by Federal funds, for the development of innovative programs for providing health services to the elderly, along with action leading toward the passage of a program to finance health insurance for the aged through the Social Security mechanism. Mid-decade saw enactment of this legislation, followed by an intensive "tooling up" period, an increasing demand for services aggravated by shortages in personnel and programs, skyrocketing costs, and a mushrooming of long-term care facilities, especially those operated for profit. Toward the end of the decade the grim reality of the enormous costs involved, caused at least in part by abuses, led to a tightening of controls. It was blatantly obvious that remedial measures and innovative delivery systems were necessary. In 1970 Congressional committees and the Department of Health, Education, and Welfare intensified their efforts in the search for effective solutions to the long standing problems of health care for the aged and to the more recent problems raised by the activities and events of the sixties.

A. FEDERAL ACTIVITIES

In 1961 the Division of Chronic Diseases was organized in the Bureau of State Services of the U. S. Public Health Service, reflecting a growing concern about the need for positive action to improve the health of the aged. A few months later the passage of the Community Health Services and Facilities Act of 1961 provided supporting funds for demonstrations of community-based programs of preventive and therapeutic services for the aged and the chronically ill. In 1962 an awareness of a need for even greater emphasis on the development of positive action programs to meet the health needs of the elderly led to the creation of the Gerontology Branch within the Division of Chronic Diseases.

The outstanding year for passage of legislation related to the health of the aged was 1965 when the enactment of the Social Security Amendments added two titles, XVIII and XIX, to the Social Security Act. Medicare, or Title XVIII, is for people 65 and older. Title XVIII is comprised of two sections known as Part A and Part B. Part A, or hospital insurance, pays the cost of covered inpatient service in the hospital and also pays for posthospital service in an extended care facility or in the home if such services are provided by a certified home health agency. Part B, or medical insurance, provides for partial payment for doctors' services and other medical and health services.

Medicaid, or Title XIX, is not specifically age-related and is a Federal-State medical public assistance program that, at the option of the States, makes vendor payments to providers of health services on behalf of recipients of cash maintenance payments in certain public assistance categories—including Old Age Assistance. In almost half the States the medically indigent aged are not eligible to participate in Medicaid.

During the same year, 1965, the Division of Medical Care Administration was created and assigned Public Health Service responsibility for the professional health aspects of Medicare. The overall administrative responsibility of Medicare was given to the Social Security Administration. In 1967 after an expansion of function and a change in name from the Gerontology Branch to the Adult Health Protection and Aging Branch (AHPAB), AHPAB was transferred to the Division of Medical Care Administration.

Regional medical programs, initially created by legislation in 1965 and subsequently amended, provide grants to assist the nation's health institutions and professions in putting into widespread practice the most recent and effective advances of scientific medicine in the prevention, diagnosis, treatment, and rehabilitation of heart disease, cancer, stroke, and related diseases, as emphysema, diabetes, and renal and nutritional disorders. Administered by the Regional Medical Programs Service in the Health Services and Mental Health Administration (HSMHA), the program stimulates and provides support to voluntary regional cooperative arrangements among medical schools, hospitals, practitioners, and other health resources. At the end of 1970, 54 of the 56 regional medical programs were engaged in operational activities.

The Partnership for Health program was created in 1966 to enable governmental and nongovernmental health and health-related agencies and groups to develop a cooperative and coordinated approach toward the goal of achieving and maintaining good health for every individual. The Partnership for Health Amendments of 1967 strengthened the program by increasing authorizations, and in 1970 legislation was enacted to extend the program to 1973.

The obvious advantages of merging the activities of the Division of Medical Care Administration and the Office of Comprehensive Health Planning led to the formation of the Community Health Service in 1968. This Service had a significant program commitment to the health needs of the aged, due to its Medicare responsibility and due to the aging functions of AHPAB that were retained in the Community Health Service. The responsibility for serving as a focal point for information with regard to health services for the aged remained with the Community Health Service, which then created the role of Coordinator of Health of the Aging to carry out this function.

Also in 1968, the National Center for Health Services Research and Development was created within HSMHA. The research and developmental activities related to automated multiphasic screening that were conducted by the Adult Health Protection and Aging Branch were transferred to this Center, along with responsibility for administration of any grants and contracts that might be related to research on the development of health service programs for the aged.

B. CONGRESSIONAL HEARINGS

The Senate Subcommittee on the Problems of the Aged and Aging, created in 1959, later became the Senate Special Committee on Aging. It has been frequently concerned with the health problems of the aged. Through the years this committee has held in depth hearings on nursing, long-term institutional care for the aged, health frauds and quackery, health insurance, costs and delivery of health services to the aged, and the health aspects of the economics of aging. In each of its annual reports the Committee has recommended a positive action program.

Extensive investigations on Medicare and Medicaid have been held by the Senate Finance Committee, the House Ways and Means Committee, and the Subcommittee on Intergovernmental Relations of the House Government Operations Committee. In addition, the

Senate Labor and Public Welfare Committee conducted initial hearings on National Health Insurance.

C. SPECIAL INVESTIGATIONS

1. Feasibility Study on Preventive Services and Health Education for Medicare Recipients

In 1968 the Senate Committee on Finance instructed the Secretary of Health, Education, and Welfare to conduct a study on the possibility of covering under Medicare the cost of preventive services and comprehensive health screening services for the diseases of old age and on the feasibility of instituting and conducting information and education programs intended to reduce illness among Medicare beneficiaries and to aid them in obtaining needed treatment.

Upon completion of the study the Secretary recommended that the coverage of preventive and comprehensive health screening services should not be added to the Medicare program at that time. Instead, he recommended that intensive population-based studies be performed to determine in greater depth the feasibility of including preventive health services and comprehensive health screening under Medicare and that additional studies be made to examine the effect of elimination of the \$50 deductible on the utilization of these preventive and screening services. The report also called for greater emphasis to be placed on health education activities to encourage sound health practices among the aged (U. S. Department of Health, Education, and Welfare, 1968).

2. HEW Task Force on Medicaid and Related Programs

Created in July 1969 by the Secretary of Health, Education, and Welfare, the Task Force on Medicaid and Related Programs was asked to examine the deficiencies of these programs and to make recommendations for their improvement within the context of existing legislation. In September 1969 the charge was broadened to include consideration of potential methods for long-term financing of the Nation's medical care. The final report, submitted to the Secretary in June 1970, had recommendations of great relevance to the aged (U. S. Department of Health, Education, and Welfare, 1970b).

3. President's Task Force on the Aging

This Task Force was established in October 1969 to assist the Administration with ideas and recommendations for the 1970's. It was requested to examine the problems faced by older people in order to determine how they can best achieve security, dignity, and independence; to review existing programs and to suggest improvements in them; and to recommend further actions that might be taken. Many far-reaching recommendations related to the health of the aged were included in their report (Presidential Task Force on the Aging, 1970).

4. HEW Task Force on Prescription Drugs

In their final report in February 1969 this task force after an eighteen month review of methods for meeting the prescription drug needs of the elderly recommended that Medicare should cover an out-of-hospital drug insurance program (U. S. Department of Health, Education, and Welfare, 1969).

5. Health Insurance Benefits Advisory Council

The Social Security Amendments of 1965, which authorized the Medicare program, established the Health Insurance Benefits Advisory Council (HIBAC), which was composed of individuals appointed by the Secretary of HEW from various professional health positions and the general public. HIBAC was charged with advising the Secretary on matters of general policy in the formulation of regulations and administration of the Medicare program. Annual reports have been issued in 1969 and 1970. The 1969 report recommended legislative and administrative changes and studies to improve the operation and impact of Medicare for the betterment of health of the aged.

D. HEALTH SERVICES

With enactment of the "Partnership for Health" legislation the emphasis of some Public Health Service activities shifted from programs of a categorical nature to those with more flexible funding and more comprehensive objectives. *Unfortunately, this has resulted in fewer individual projects designed exclusively for the aged.* Although the continued need for the development of innovative health services with regard to health protection for the aged who are well has been recognized, as has the need for supportive community services as a means for preventing institutionalization of the chronically ill aged, there has been a de-emphasis of support on the part of the Federal Government for such categorical programs.

One program funded by the Administration on Aging tangentially involves the comprehensive health planning process. Funds have been granted to the Community Service Council, Inc. in Birmingham, Alabama, which has also been designated as an Areawide Comprehensive Health Planning Agency. These funds are for the development of a comprehensive service delivery program for the aging—including social services, outreach services, volunteer training, assurance of health services, and various innovative approaches. Some support for other types of health service programs for the aged is available from the Administration on Aging and from the Office of Economic Opportunity, but this represents a very limited number of programs.

It is extremely difficult to get a complete picture of all the health services available to the aged because there is no central clearinghouse for this type of information. Therefore, the descriptions of the following programs represent only examples of the types of activities currently being undertaken.

1. Health Services in Housing for the Elderly

Early in the decade the concept of protecting the health of the elderly by providing health maintenance services where they live was investigated for its effectiveness. With Public Health Service support, a pioneering program was undertaken in a public housing project for the aged in Providence, Rhode Island. The question to be answered was: Would these factors—a health promotion program, easy accessibility of services, and a permanent staff of carefully selected personnel who enjoyed working with the aged—improve the health status of the residents?

At the end of the two year study period the Director of Health for the Rhode Island Department of Health, said:

The health services provided at Dexter Manor have proven to be successful beyond all expectation. Previously unknown health problems have been brought to

light, and known health problems have been handled more effectively because of these services. I am convinced that these services will be extended and developed at an even greater degree, not only at Dexter Manor, but at other housing facilities for the aged (U. S. Public Health, 1966).

This prediction has come true in Rhode Island. Not only has the original program continued with community support, but all housing projects for the elderly in Rhode Island now have some form of health maintenance program.

In Fall River, Massachusetts, a program operated by the municipal hospital has recently established a clinic to provide ambulatory services in the basement of a public housing project for the physically handicapped and the elderly. A tunnel connects this clinic to an in-patient rehabilitation clinic and a municipal geriatric hospital, making a broad range of health services easily accessible. An investigation to determine the impact of such a program in preventing institutionalization of the physically handicapped and the elderly is being jointly funded by the Department of Housing and Urban Development and the National Center for Health Services Research and Development.

In Syracuse, New York, a program to provide health services in housing for the elderly is being funded through the Partnership for Health legislation. Additional support is provided through local health and health-related organizations, and the program is being conducted in close collaboration with Syracuse University. In Michigan support is being provided by the Administration on Aging for a limited number of programs similar to the one at Dexter Manor.

2. Information and Referral Services

In many communities various agencies and activities are geared to providing health or health-related services to the elderly. These may include homemaker services, home health services, health departments, voluntary health agencies, the Veterans Administration, senior citizen centers, the Salvation Army, district or local Social Security offices, and family service agencies. A medium sized city may have 400 separate service agencies; a large metropolitan center may have as many as 1,000. An Information and Referral Service is designed to sift through this great maze of agencies to help the aged individual, his family, and/or the health practitioner to learn about the existence of the proper source of aid and facilitate referral to it.

Currently there are approximately 300 Information and Referral Services serving the general public in the nation; of this number, approximately one-third give special emphasis to the problems of the aged. This special emphasis includes such features as the establishment of a data bank relevant to the health problems of the aged and/or a special staff to deal with their needs. In most cases multiple sources of community funds support the Information and Referral Service programs. These generally include combinations of community funds (as Community Chest, United Fund), local governmental funds, voluntary health agency funds, and direct contributions. Many communities anxious to develop additional programs of this nature have been unable to do so because of lack of sources for sufficient funding.

3. Home Health Services

Prior to the passage of Medicare very few of the voluntary insurance programs provided coverage for home health services, partly because there were few organized programs of home care available in the country. With the passage of Medicare the Public Health Service mounted

a major effort to develop home health agencies that could participate in the program. Participation requirements include the provision in the home of skilled nursing plus at least one other therapeutic service provided under the direction of a qualified physical, occupational, or speech therapist and medical social workers or home health aide services. By 1970, 2,300 home health agencies had qualified to participate in the Medicare program. Many agencies have had difficulties adjusting to Medicare claims review procedures and the coverage limitations in the Medicare law. Some feel that these limitations pose a serious threat to the solvency of existing home health programs.

In recent years, studies have been conducted to find answers to questions such as: Why are existing programs not better utilized by local physicians? What is the reaction of physicians to the home health programs? Does the elderly person prefer such services as an alternative to institutionalization? Some studies suggest that home care programs may not be more widespread or more fully utilized because many physicians are unaware of the value of the programs and tend to have negative attitudes toward changing their usual patterns of practice. Other studies have shown that physicians who do make use of home care programs are generally satisfied with them and, more importantly, that the patients served by such programs prefer care in the home to hospitalization or institutionalization.

4. Geriatric Services Through Neighborhood Health Centers

The neighborhood health center has been viewed as a means of delivering ambulatory health services to individuals of all ages in a low income neighborhood. The Public Health Service sponsors 41 comprehensive health care programs (including 14 neighborhood health centers recently transferred from the Office of Economic Opportunity). An additional 69 neighborhood health centers are funded by the Office of Economic Opportunity. This approach to organizing ambulatory care has obvious advantages to the patient, as well as to the health professionals who are assuming new, more responsible roles. If they are closely tied to health care institutions and to home care programs, the entire spectrum of medical care can be made available in an accessible and continuous manner.

Many of the neighborhood health centers are still in the developmental stages; therefore, definitive data is not yet available on how effectively the health needs of the aged are being met by these programs. However, of the 69 neighborhood health centers supported by OEO three have geriatric clinics, one has a club for diabetics, and one has group occupational therapy for the elderly. These specialized services for the aged are obviously the exception rather than the rule.

5. Comprehensive Health Care Through the Health Maintenance Organization

In March 1970 the Secretary of Health, Education, and Welfare issued a statement asking for authority under the Medicare law to enter into health maintenance contracts for the delivery of comprehensive health services to the elderly and for payments to providers on a prepaid, per capita basis. It is hoped that this type of arrangement can also be developed under Medicaid. New legislation is not necessary for this.

A cornerstone of this mechanism is the opportunity for consumers to choose between the alternatives of obtaining services from a health maintenance organization or arranging for them in the usual way from individual doctors and hospitals. The consumer would have the choice of withdrawing from enrollment in a health maintenance organization if he finds the service unsatisfactory. The Federal Government would enter into arrangements with individual

health maintenance organizations, subject to special standards, including the assurance that every contractor will serve persons of high medical risk as well as the healthy.

Some States have laws that prohibit the group practice of medicine, so essential to the success of this type of organization. If the health maintenance organization mechanism for delivering services becomes operable, these States will have to be encouraged to remove these barriers. Consideration is being given to the development of several demonstration programs to test the merit of this mechanism.

6. Services in Extended Care Facilities and Skilled Nursing Homes

The extended care facility (ECF) as defined by Medicare is a separate institution or a distinct part of another institution (as a hospital, nursing home, or home for the aged), and it provides a level of care that lies somewhere in between the intensive medical services of the acute hospital and the long-term nursing in a nursing home or a home for the aged. Viewed as an extension of the hospital, the ECF is designed for the person who has recently been discharged from a hospital but who still needs continuous skilled nursing care or rehabilitation services. The Medicaid program uses the term "skilled nursing home" for basically the same type of facility as the extended care facility.

Prior to Medicare there had been virtually no national standards for nursing home care in Federally assisted programs and licensure requirements varied considerably from State to State. Through the application of Medicare standards progress was made in eliminating fire hazards, raising professional staff levels, and improving records. Similar results are now being achieved under Medicaid. During the past year the problems of certification, standards, staffing, utilization review, and reimbursement in these institutions have been the focus of attention in State and local investigations, Congressional hearings, and various Task Forces. Disastrous fires and an epidemic occurred in nursing homes considered of "better than average" quality and sharply intensified the concern of all levels of government, as well as the general public, with these forms of health care. Consumer groups at the local level have been formed to call attention to the problem and to press for improvements.

7. Long-Term Care Services

It is recognized that long-term care in an institutional setting is becoming a necessity in the later years of life for an increasing number of our citizens. Neither Medicare nor Medicaid was designed to deal with the problem of financing long-term care—the focus of these programs is almost entirely on shorter-term medical care. This serious gap in coverage has led to unnecessary use of hospitals, extended care facilities, and skilled nursing homes, inflating the costs of Medicare and Medicaid. Great concern about the magnitude of the problem and the need for positive action is expressed by health planners, but to date this remains an underdeveloped program area. Even most "national health insurance" proposals do not cover long-term care.

Once his medical needs are stabilized, the elderly or chronically ill patient may require personal care services—such as daily assistance in eating, going to the toilet, bathing, and dressing—over a very prolonged period of time. Currently payment for care in the "Intermediate Care Facility" is through the welfare agency and only those who qualify for welfare benefits are eligible; the "medically indigent" (those able to take care of their own living expenses but unable to pay for needed medical care) are not included.

The Report of the Health, Education, and Welfare Task Force on Medicaid and Related Programs pointed out that piecemeal modifications of the Medicare and Medicaid

programs cannot deal effectively with long-term needs and that if a positive program is not developed to provide long-term care services, present medical care programs will be increasingly abused (U. S. Department of Health, Education, and Welfare, 1970b). The Task Force made the following recommendation:

. . . that the Department of Health, Education, and Welfare develop a policy which addresses directly the need for long-term care services and recognizes that a long-term care program has these components:

- (1) Personal-support services (chronic care, general nursing services, psychosocial activities and assistance with daily living) aimed at improving the quality of life for people with long-term disabilities.
- (2) Residential services (room and board), and
- (3) Medical, dental and psychiatric services, when needed.

The Task Force also suggested that the White House Conference on Aging would provide a timely forum for the amplification and discussion of this pressing problem.

E. DEFICIENCIES IN FINANCING HEALTH SERVICES

It cannot be assumed that the mere creation of financing mechanisms both to underwrite the development of health services and to pay for their delivery will insure the continuation of previously developed services or the development of necessary new services. Currently two conditions prevail: (1) lack of continued financial support at local and State levels has led to the dissolution of many of the Federally funded demonstration programs, and (2) many proposals for important new health programs have remained on the drawing board because of the lack of funds.

The experience in New York State with regard to the development of nonprofit comprehensive home health programs graphically illustrates a situation that has occurred in many areas. Early in the decade the "Chronic Illness and Aging funds" provided by the Community Health Services and Facilities Act were used in New York to support the development of several major demonstrations in comprehensive home care services on a community-wide basis, moving from the traditional public health nursing visits in the home to coordinated medical care programs aimed at preventing or delaying the need for institutionalization. At the end of the three-year period of support from this source, pre-Medicare seed money was made available to develop training and service programs for home health aides and nurses. With the cessation of both the Chronic Illness and Aging funds and pre-Medicare seed funds, the development of the new nonprofit home health programs came to an abrupt halt. The subsequent lack of public financing mechanisms has prevented development of these needed home health services along with exploration into new approaches that might increase their effectiveness and reduce their costs. Moreover, funding problems for the nonprofit agencies have led to an increase in the number of proprietary groups developing home health services and a corresponding escalation in prices.

The Information and Referral Service program has been demonstrated to meet an important need in community programs for health of the aged. Current priorities on use of Partnership for Health monies effectively preclude further use of these funds for this purpose.

Lack of Federal funding for initiation and development of such programs has proved to be a serious deterrent to new programs of this type.

In a ghetto area in Boston the Council of Elders—financed by a private foundation—has been providing support for visiting nurses to staff several public housing projects for the elderly for limited periods during the week. Experience has revealed that many emergency cases among the elderly occur during the night when this service is not available, often resulting in hospitalization that could have been prevented if a nurse had been on hand to assess the situation and take necessary measures. The concept of an emergency telephone service for the night hours, manned by the Visiting Nurse Association, was proposed as an effective solution, but lack of funding sources precludes further development.

The President's Task Force on Aging looked with great favor upon the potential of the neighborhood health center as an effective vehicle for delivering health services to the elderly. As a partial solution to the problems of continued financing, the Task Force proposed as the mechanism of support "front-end financing" from the Medicare Trust Fund and the Medicaid appropriation, which would "ear-mark" a certain proportion of total available funds for the development of such health services and centers. The Task Force stated:

We, therefore, recommend that the President seek Congressional authorization for front-end financing from the Medicare Trust Fund for a full range of geriatric health services including community health aides devoted exclusively to working with the elderly, transportation to and from health facilities, home care, and preventive techniques such as screening and health education. We further recommend that whenever possible these services be delivered through neighborhood health centers. We also recommend that the number of such centers be expanded through front-end financing from the Medicaid appropriation (Presidential Task Force on Aging, 1970).

The concept of front-end financing for the support of demonstrations and services for a broad range of health programs for the elderly was also endorsed by the Task Force on Medicaid and Related Problems and by numerous expert witnesses appearing before Congressional committees.

F. MANPOWER TRAINING

Although some professional groups that serve the health needs of the aged have demonstrated an awareness of the need for training and orientation in applied gerontology for their members, this is a much neglected area. A three-pronged approach is needed to enrich the content of the curricula in undergraduate training, to provide programs of continuing education for the health practitioner, and to train new types of paraprofessionals—for example, the geriatric outreach worker. However, it is far more difficult to motivate the independent private practitioner to participate in such training than it is to bring such training to the individual already working within an institutional setting.

One approach, aimed at stimulating both interest and activity, was to develop Gerontological Centers at universities. Several were funded by the Public Health Service, but this type of support was sharply reduced because of budgetary limitations, and very few of these centers are still operational.

1. Regional Medical Programs

Extensive Federal support for educational activities is provided by the Regional Medical Programs Service. All 56 Regional Medical Programs have continuing educational and training programs for physicians, nurses, and allied health professionals—covering the prevention, detection, diagnosis, treatment, and rehabilitation of heart disease, cancer, stroke, and related diseases that particularly affect the elderly.

2. Bureau of Health Professions Education and Manpower Training

The Bureau of Health Professions Education and Manpower Training of the National Institutes of Health provides major support for training personnel to meet emerging needs in the health field. Through the traineeship mechanism the Bureau supports students pursuing full-time graduate training in public health with majors in "adult health and aging" and gerontology.

Also included is support for short-term courses relating to geriatric medicine and gerontology. For example, this Bureau has funded an activity in which the Community Health Service of the Health Services and Mental Health Administration is working with several national professional societies to assist their efforts to train health professionals to offer more effectively their services in long-term care facilities. The American Medical Record Association, the American Pharmaceutical Association, and the American Speech and Hearing Association have already been involved in staging national training programs (in the regions and in some States); other societies that have agreed to accept this responsibility include the American Nurses Association, the National Association of Social Workers, and the American Dental Association. Also, the American Medical Association may begin a national training program for physicians who serve in the capacity of medical directors of long-term care facilities.

In addition, various long- and short-term training programs are supported for the training of nurses, pharmacists, physical and occupational therapists, dietary consultants, social workers, dentists, and other health professionals.

3. Training for Nursing Home Administrators

Encouraging the development of training programs for nursing home administrators was enactment of legislation requiring the States to establish programs for the licensing of nursing home administrators by July 1, 1970, and for the development of programs of training for waived administrators. Regional conferences to strengthen and update training programs for practicing administrators and for those who wish to enter the field were developed by the Community Health Service (HSMHA), working in collaboration with the Medical Services Administration of the Social and Rehabilitation Service.

The W. K. Kellogg Foundation provided support for strengthening the capacity of selected university continuing education centers to provide training for long-term care facility administrators. This Foundation also supported the extension of programs in continuing education in long-term care administration by the Association of University Programs in Hospital Administration.

4. Geriatric Outreach Workers

Interest in the training of professionals and allied health workers has been coupled with increasing concern for the training of outreach workers. An example of this is a project that the National Institute of Mental Health is currently funding at Case Western Reserve University for the training of paraprofessionals, Geriatric Outreach Workers, to serve as a liaison between the aged client in the community and the agency. These workers will be inner-city poor who will be able to improve their own mental health while helping the aged to maintain their independence and to delay, if not prevent, institutionalization. Within the agency the Geriatric Outreach Worker will free the professional from nonprofessional services and enable him to perform his professional duties more effectively.

5. Project Late Start

An awareness that the need to help the aged become more self-sufficient had not been met paved the way for Project Late Start, funded by the Office of Economic Opportunity. In this program through four demonstration projects the aged are guided in assessing their situations and are made aware of existing agencies and services that can help their lives.

6. Resource Materials

In recognition of the fact that resource material in applied gerontology was urgently needed by a broad range of health professionals who work with the aged, the Community Health Service (HSMHA) developed a comprehensive body of knowledge released in the form of a four volume series (U. S. Department of Health, Education, and Welfare, 1969-71).

Several health and health related topics of relevance to the aging and aged have been the subjects of pamphlets written for the lay public and published by the Public Affairs Committee. This group has also produced a film, "Tell Me Where To Turn," under a Public Health Service grant. The film portrays how an Information and Referral Service can guide people in the community to agencies that can help them with their problems. The film also documents how gaps in services needed to provide comprehensive care can be identified. It has stimulated a considerable amount of interest in developing focal points in the community where the needs of the chronically ill and aged can be met.

Another film for the lay public that has remained in great demand for more than five years is "Critical Decades." Produced by the Public Health Service, the film stresses the need for health protection and for the development of healthy patterns of living in one's forties and fifties in order to promote optimal health in the later years.

Many voluntary health organizations, such as the American Heart Association and the American Cancer Society, promote and prepare materials for public education including publications, television spots, conferences, and visual aids. While this information is not especially focused on the aged, much of it is related to the chronic diseases that particularly affect this age group.

G. RESEARCH

The bulk of research in the provision of health services for the aged is currently being supported through the National Center for Health Services Research and Development in the Health Services and Mental Health Administration.

In its deliberations the President's Task Force on Aging felt that the possible relationship between inflation in the cost of health care and both Medicare and Medicaid suggested that further inquiry about how the Nation's health care system meets the health problems of the elderly was necessary. As a means of finding some of the answers the Task Force made the following recommendation:

We recommended that the Health Services and Mental Health Administration establish within the National Center for Health Services Research and Development a Council for the study of the organization, planning, management, financing, and delivery of health care for the elderly. We further recommend that within a reasonable period of time this Council design, conduct, and report on large scale experiments concerning comprehensive coverage, incentives for comprehensive care which could be added to existing health programs, and the effect of removing or reducing the deductible and co-insurance features of Medicare (Presidential Task Force on the Aging, 1970).

According to the National Center for Health Services Research and Development, instead of compartmentalizing research activities as these relate to the aged, some health professionals and community leaders would prefer to follow the present approach in which efforts are directed at improving and extending health services on a community-wide basis, with priority given to development of services for the disadvantaged. In this approach the elderly are regarded as an important subgroup.

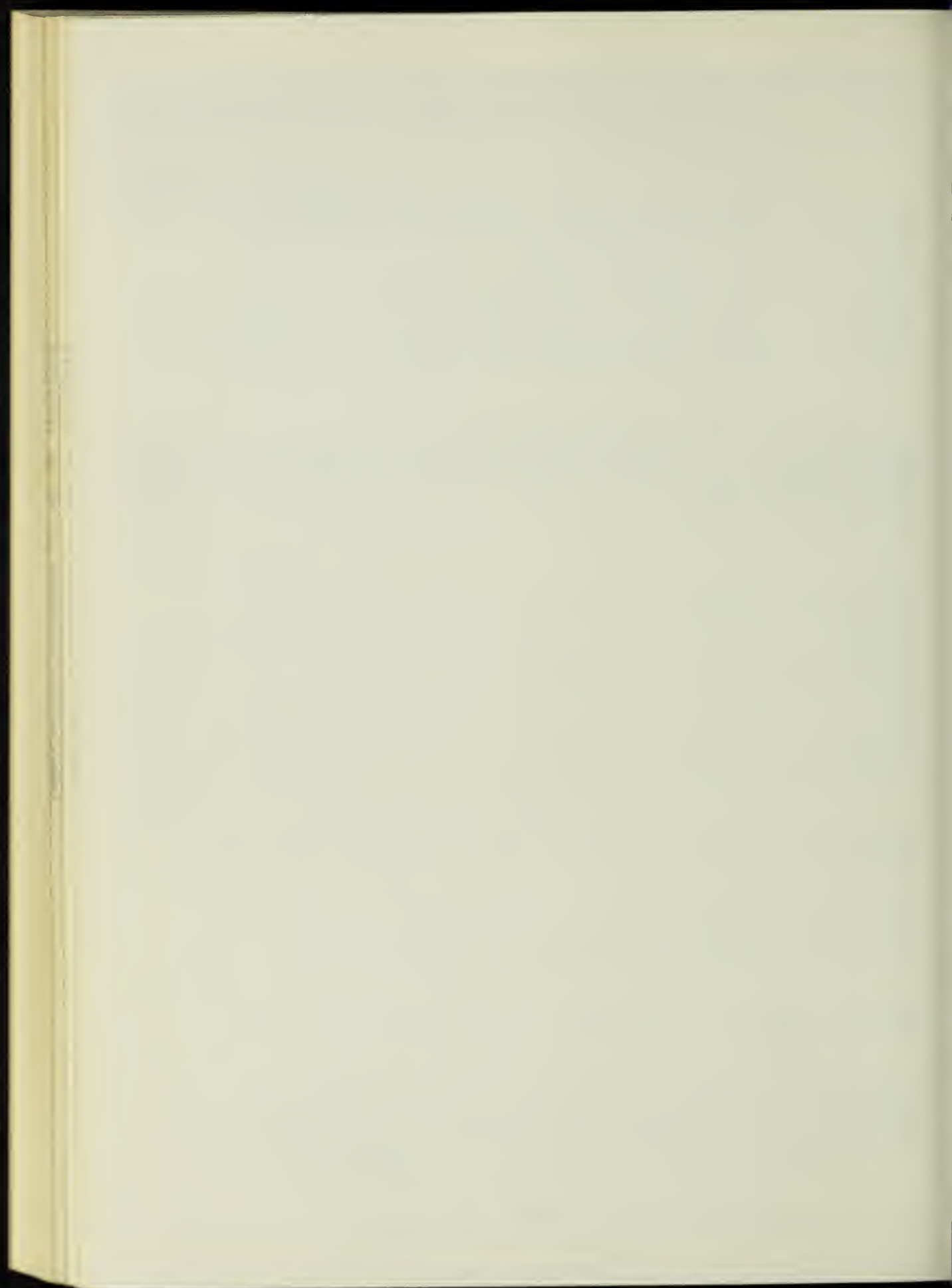
The National Center is supporting the creation, testing, and demonstration of prototype community health services systems, and at the same time it is attempting to improve the components necessary for such systems through development of (1) new types of health services manpower to extend the effectiveness of doctors, (2) new financing arrangements, (3) ambulatory and inpatient health care programs designed to provide comprehensive services to all people, and (4) inter-institutional arrangements to link doctors' offices, hospitals, and other facilities and services for continuous care. In designing the components for ambulatory and inpatient care, special attention is being given to the comprehensive and continuous care of the chronically ill and the elderly. Similarly, in developing improved arrangements for financing patient care, the effects of removing or reducing the deductible and co-insurance features of Medicare and other insurance plans are undergoing study.

Examples of research directly concerned with health of the aged that is currently supported by the National Center for Health Services Research and development are as follows:

- (1) Production of a comprehensive State-by-State analysis of laws affecting facilities for the aged in the form of a written manual on Nursing Home Law, which, it is contemplated, will be styled after the Hospital Law Manual published by the Health Law Center.
- (2) An action-research project in which applicants to a long-term care facility are evaluated by a multidisciplinary team.
- (3) A study of the impact and an evaluation of the relative effectiveness of diagnostic-evaluation services and follow-through services to applicants to a long-term care facility, including a cross-sectional and longitudinal study of these applicants.

- (4) A review of the published literature and unpublished information about nursing homes and nursing home research with a view to defining research needs and possibilities.
- (5) An examination of the transition from a classification reimbursement system for nursing home care to a cost-plus system by contrasting the payment systems as these affect the level of patient care in order to reduce and control medical care costs to the aged.
- (6) Development and demonstration of improved methods of finding and reaching impaired older people and of serving their differential needs, using inter-agency coordinated approaches, in order to formulate a set of recommendations, based on evaluation, for the provision of protective services on a continuing basis.

Obviously, the research activities on specific chronic diseases supported by the National Institutes of Health and the basic and clinical health research as supported by other public organizations, as the Veterans Administration, as well as by private organizations, have a great impact in the field of aging.

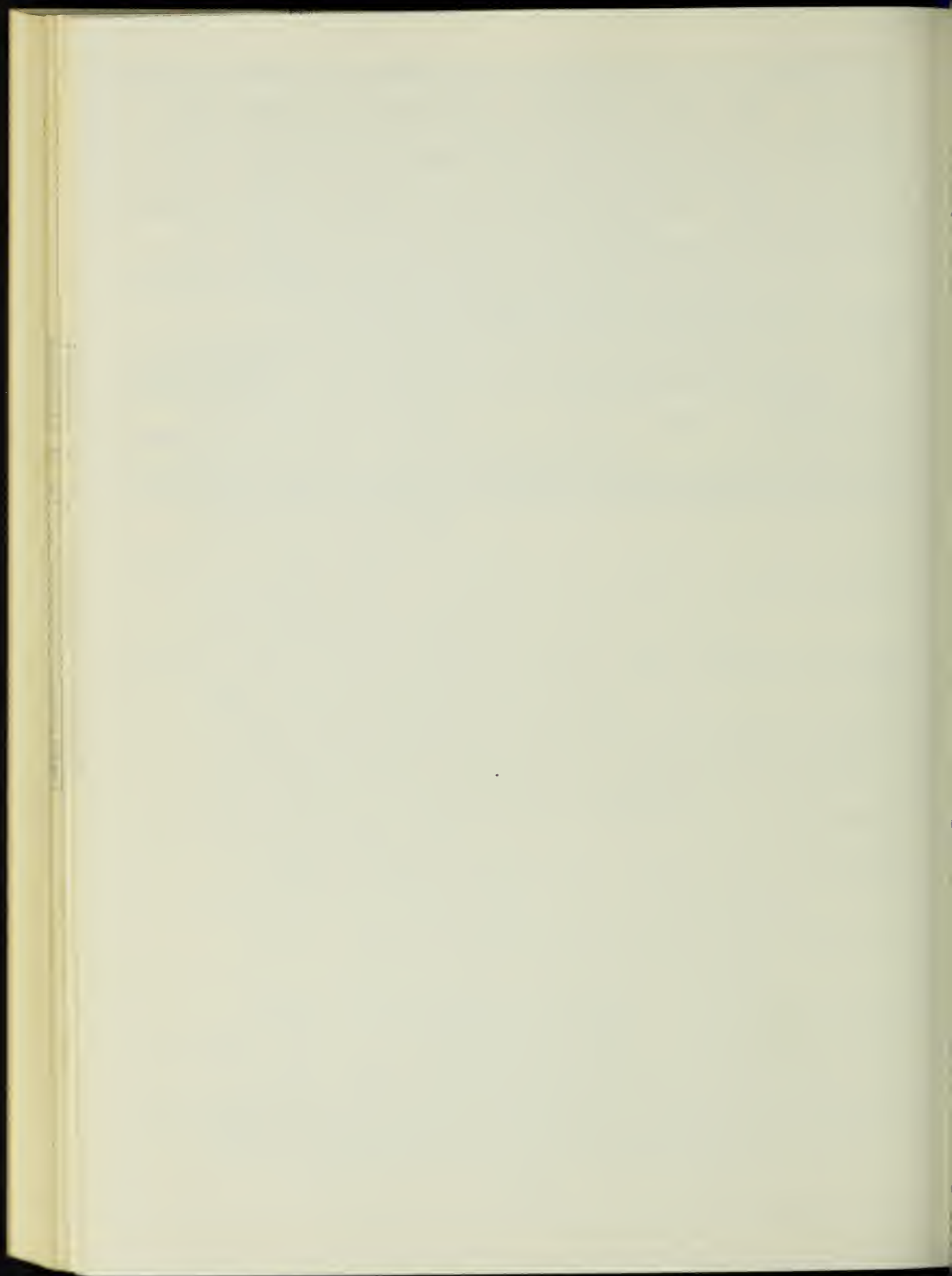


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PART TWO: MENTAL HEALTH

I. INTRODUCTION—THE NEED

As one reviews the recommendations of the White House Conference on Aging held ten years ago, one is impressed by the fact that even though a few significant achievements have been made, we face essentially the same problems today, particularly in the area of mental health services for the aged. Medicare and Medicaid legislation has in many ways helped to pinpoint problems of aging that lay hidden and unrecognized, but it has brought additional problems relating to the economics, administration, and adequate delivery of health care services. Such problems as alcoholism, drug dependence, suicide, and adequate nutrition for the elderly remain virtually untouched. Training and manpower problems and problems of educating the general public and the elderly themselves on matters relating to aging are as great if not greater than they were ten years ago. Problems relating to the development of preventive services, to fragmentation and duplication of services, and inadequacy of methods of providing continuity of care have become even more obvious. Treatment methods are available, but because of manpower shortages and lack of public and professional interest and motivation they are not always applied as they should be. Administrative issues relating to community, State, and Federal responsibility and authority remain vague and unclear.

Though psychosocial concepts of aging have lagged behind the often spectacular progress of biologic medicine in recent decades, society is now beginning to look at the aged from a new perspective, to recognize their right to have the resources of the community mobilized in their behalf. The elderly mentally ill and socially disabled face a variety of difficulties requiring a variety of treatment and management approaches. They do not constitute a single group suffering from what is much too often regarded as the inescapable deterioration of old age. The development of the facilities and services to provide comprehensive care for this segment of our population will go a long way toward lightening the burden that mental and related physical disability places on the aged and on their families, and others in the community who must care for them.

Preventive services that lessen the chances or decrease the speed of psychosocial and physiologic deterioration will delay or prevent the necessity for hospital or other institutional care. Day care and "respite" services may make it possible for families to keep an elderly relative at home without making intolerable personal and economic sacrifices. A benefit that cannot be measured is that of making life worthwhile for an old and perhaps sick and confused person by giving him a feeling of contact with the world around him and of worth and dignity as part of the human community.



II. LONG-RANGE GOALS

The long-range goals of a mental health program for the aged begin with those general goals whose aim is the development and utilization of the potentialities of older people and the improvement of their mental and physical well-being—to help them to live and die with dignity. More specific mental health goals were suggested by the mental health workgroups of the White House Conference on Aging held in 1961 (see Appendix). Even though there have been accomplishments in some areas during the intervening years, these goals remain essentially the same.

In its broadest sense, prevention of geriatric mental illness requires the provision of environmental advantages throughout life, minimal exposure to injurious circumstances and agents, including disease, and maximal use of available preventive and remedial medical and social services. Even so, a significant number of old people will develop varying degrees of dependency because of chronic physical disability or mental impairment or combinations of the two. Our primary mental health goal for these persons is to provide adequate and appropriate supportive, therapeutic, and rehabilitative programs to help them live at home or, if necessary, in appropriate health care or residential facilities, with the provision of a wide range of services covering all levels of physical and mental disability. The achievement of this goal will require the necessary number of high quality facilities; the training of adequate numbers of professional, allied health, and administrative personnel; the support of research to provide the basic knowledge and techniques needed for a fuller understanding of the aging process and for the development of more specific preventive and treatment programs and more efficient and economic methods for the delivery of mental health services to the aged; and the development and expansion of educational programs for professionals, the general public, and the aged and their families—such programs to be related to understanding human development, including the biologic, psychologic, and social aspects of the aging process and its associated problems.

The recent Task Force on Medicaid and Related Programs, appointed by the Secretary of Health, Education, and Welfare, emphasized that:

health must remain high on the scale of social, economic and political priorities—not only because the health of the nation is basic to the growth and productivity of the economy, but also because human compassion insists that essential individual health needs shall be met (U. S. Department of Health, Education, and Welfare, June 1970b, p. 2).

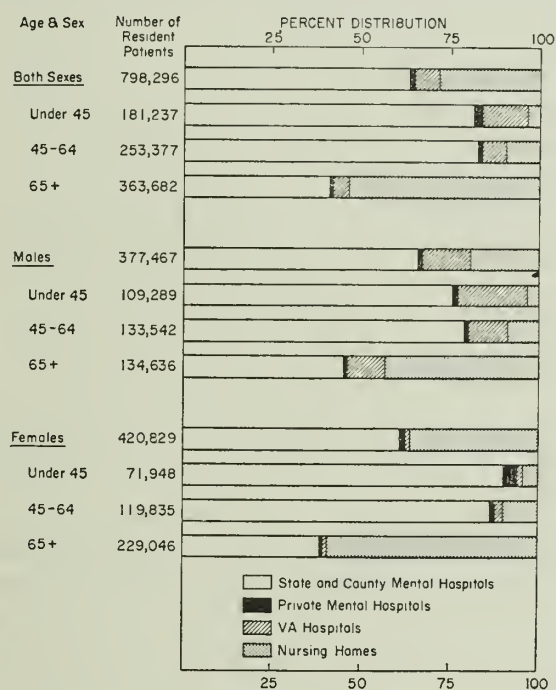


III. KNOWLEDGE AVAILABLE

A. EPIDEMIOLOGY

The almost 20 million persons aged 65 and older in the United States today make up nearly 10 percent of the population. About four percent of this age group—approximately 800,000 persons—live in institutions of various kinds. Fewer than one percent are in mental hospitals (Figure 1), but studies have indicated that a significant proportion of the aged in other types of institutions (boarding homes, nursing homes, old age homes) are psychiatrically impaired to a greater or lesser degree (Goldfarb, 1962; Stotsky, 1967). That approximately one million elderly persons are in institutions probably is a measure more of the present availability of such care than of actual need. Many of those in institutions might be in the community if adequate supportive services were available for them.

FIGURE 1.—PERCENT DISTRIBUTION OF PATIENTS WITH MENTAL DISORDER RESIDENT IN SELECTED LONG-TERM INSTITUTIONS, BY AGE AND SEX, UNITED STATES, 1963



Source: Kramer, Morton, Laub, Carl and Starr, Sheldon. Patterns of Use of Psychiatric Facilities by The Aged: Current Status, Trends, and Implications. American Psychiatric Association Research Report No. 23, Washington, D.C.: The Association. 1968.

In addition, a little more than three million elderly persons who live in the community suffer from moderate or severe psychiatric impairment (Lowenthal *et al.*, 1967). These individuals may be able to function relatively well in spite of their psychiatric disturbances, or they may be so marginally functional that a very slight disruption of their life pattern—an economic, social, or health change—will precipitate a crisis that will lead them to a hospital or other type of residential care facility. It can be estimated that a little less than one million of these elderly community residents suffer from such severe psychiatric impairment as to make them as sick as many of those who are already hospitalized.

The basic tools with which to develop accurate systematic epidemiologic data about mental disorders among the aged are only partially available. The diagnostic classification of geriatric psychiatric disturbance is complex, and the statistical data that are available come for the most part from mental hospitals and outpatient clinics. The limitations of estimates based on these statistics are marked. Admissions to and discharges from various facilities are determined by a wide variety of administrative policies and social, economic, and related factors, as well as by available resources. Variations in rates and numbers of patients admitted, discharged, and resident result from these selective factors as well as from the actual level of incidence and prevalence of mental disorders in the population from which the patients are drawn (Kramer, *et al.*, 1968).

In addition, changes in basic physical and psychologic capacities, though they may not noticeably influence behavior in an interview or test situation, may in fact seriously impair social functioning, especially in stressful situations in day-to-day living. As capacities diminish, the relative independence of the physiologic, psychologic, and social spheres no longer obtains, as if a margin of safety permitting substantial independent fluctuations were lost. Thus, if physical functions deteriorate or environmental stresses are intense, there are more likely to be repercussions in the psychologic and behavioral spheres (Clausen, 1968). Most major studies attempting to assess mental health in the aged tend to focus on symptoms and deficits, and pay relatively little attention to strengths. As a result, estimates of pathologic tendencies found may be high and give a misleading picture of the ability of persons in the population studied to function relatively independently and effectively.

A number of old persons in the community probably are treated by their physicians for physical illness without adequate recognition of the presence of mental impairment or emotional disturbance. Many old persons, especially isolated ones, never see physicians, ignoring their own physical and mental handicaps by explaining them as mere quirks of aging. Even among elderly persons who are in mental hospitals because of chronic brain syndromes, associated functional disorders often go unrecognized and undiagnosed.

Thus, there is no doubt that the magnitude of the problem of psychiatric disorder among those aged 65 and older in this country is very great (Jaco, 1960, p. 32). Ten years ago, the mental hospital population of all ages in the United States was a little more than 500,000. Preliminary data for 1969 show a total State and county mental hospital population of all ages of a little less than 400,000. The elderly constitute approximately 30 percent of this population, about 120,000 persons. This proportion of elderly in the mental hospital population has remained relatively stable nationally over recent years, even though there is considerable variation from State to State and even though the total number of patients of all ages in mental hospitals has been decreasing over the past 14 years (U. S. Senate Special Committee on Aging, 1970).

In those States where there has been a decline in the proportion of the aged in the mental hospital population, the reasons vary and many factors have contributed: increased availability and utilization of alternative care facilities for the aged, more screening programs

in the community, availability of financing through Medicare and Medicaid legislation, availability of psychopharmacologic agents, the general trend toward reduced duration of hospitalization for the mentally ill, development of community mental health centers, and administrative pressures and policy changes of State departments of mental hygiene to reduce mental hospital resident populations (National Association for Mental Health Reporter, 1970).

Half of the aged in mental hospitals have been there for many years and constitute the therapeutic failures. These are likely to be schizophrenic patients with an average duration of hospitalization of 20 years. First admissions after age 65 tend to suffer from organic brain syndromes; the younger mentally ill aged, both in mental hospitals and in the community, have a higher proportion of functional illness (Figures 2. and 3.)

If it were not that the majority of patients, especially those with organic brain syndromes, have been cared for through a large part of their illness at home by relatives and other caretakers, the hospital admission rates for this age group would be much higher. If adult children tend to move farther away from their aged parents, and if women seek employment outside the home even more than at present, or if the birth rate falls, so that there is an increase in the relative proportion of the aged in the population, then we can expect an even greater proportion of elderly who may eventually need residential care outside the home (Kay, *et al.*, 1970).

B. GERIATRIC MENTAL ILLNESS

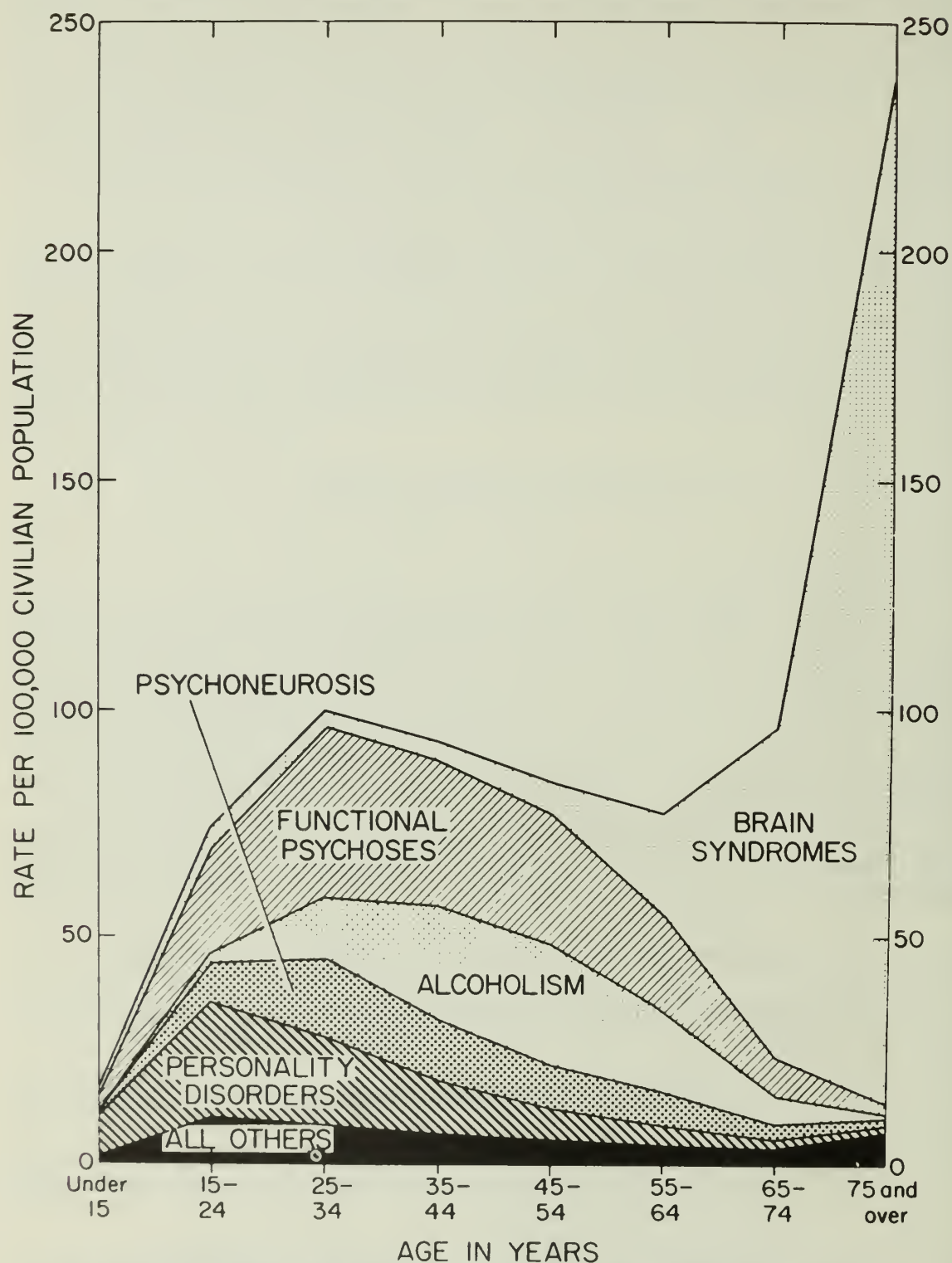
1. Problems of Aging

The needs of aged persons are much like those of younger persons—to enjoy friendship and social contacts, to be busy at work and leisure activities in keeping with one's capacities, and to be in reasonably good health. A normal old person will often engage in some effort to try to understand what his life has meant and what needs to be done before it is over. At best, he will feel that all in all his has been a good life, and this will contribute to his sense of self-esteem and achievement. He will have few complaints about himself and others will make few complaints about him (Butler, 1963). He will accept his "one and only life cycle as something that had to be and that, by necessity, permitted of no substitutions" (Erikson, 1963).

A number of patterns of successful and unsuccessful adaptation to aging have been described. One study (Reichard, *et al.*, 1962) on the personality of aged persons described various types as:

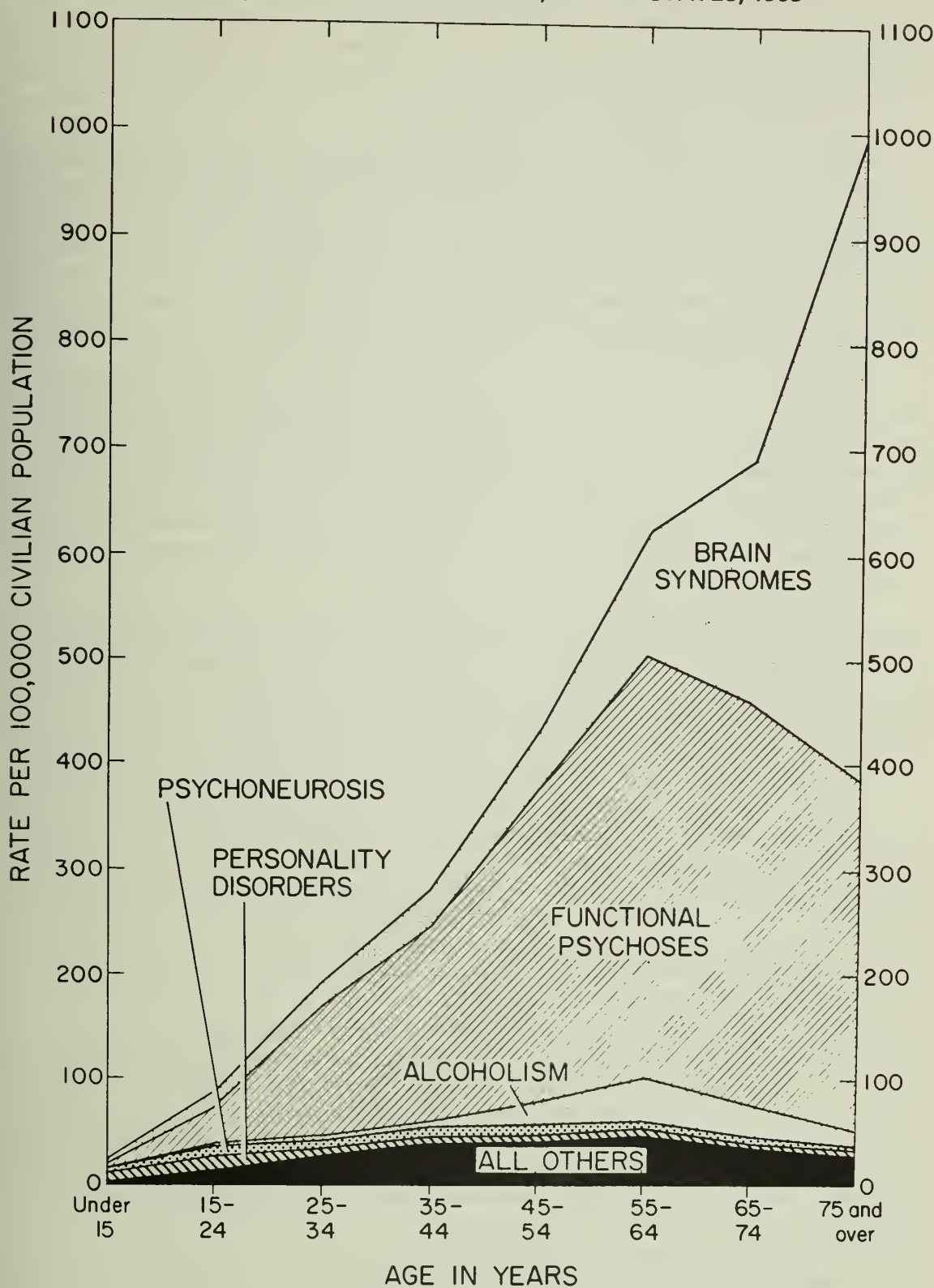
- (1) The **mature** type, with a constructive, active, and involved approach to life.
- (2) The **rocking chair** type, with tendencies to lean on others and to be relatively passive.
- (3) The **armored** type, with well-developed defenses, often of an overcompensatory kind.
- (4) The **angry** type, often hostile and characteristically blaming others for his own problems and limitations.
- (5) The **self-haters**, who are likely to be depressed and self-derogatory, with low self-esteem.

FIGURE 2.—FIRST ADMISSION RATES TO STATE AND COUNTY MENTAL HOSPITALS, BY DIAGNOSIS AND AGE, UNITED STATES, 1963



Source: U.S. Department of Health, Education, and Welfare. Patients in Mental Institutions, Part II—State and County Mental Hospitals, 1963. Washington, D.C.: U.S. Government Printing Office.

FIGURE 3.—RESIDENT PATIENT RATES IN STATE AND COUNTY MENTAL HOSPITALS, BY DIAGNOSIS AND AGE, UNITED STATES, 1963



Source: U.S. Department of Health, Education, and Welfare. Patients in Mental Institutions, Part II—State and County Mental Hospitals, 1963. Washington, D.C.: U.S. Government Printing Office.

It is generally held that independence and self-reliance are essential ingredients of maturity. It should also be recognized that dependence, or, rather, mutual realistic interdependence can also be a mark of maturity (Clark, 1969). Many aged persons are to some extent dependent because of physical handicaps, and a realistic acceptance of this by both the handicapped person and the caregiver is constructive.

The elderly are vulnerable to a number of stresses. The physical, psychologic, social, and economic deprivations to which the aged are subject in our society influence their physical and mental condition and, more importantly, their capacity for physical and social self-maintenance and self-sufficiency. Both the individual and the cumulative effects of physical illness and of various psychosocial factors have been implicated in the causation, the changes in symptoms over time, and the outcome of mental illness in the aged. The cumulative effects of many stresses and deprivations, often over a long period of time, may lead to psychologic breakdown in individuals for whom no one overwhelming cause of mental illness can be found (Lowenthal, *et al.*, 1967).

Stresses to which the elderly are particularly exposed include: physiologic stresses related to both decreased physical functional capacity and acute or chronic physical illness; psychologic stresses related to dependency, isolation, loneliness, and inter- and intrapersonal and intrafamily conflicts; and stresses arising from personal and socioeconomic losses such as retirement, widowhood, loss of family and friends, and loss of occupational status and adequate economic support. The cumulative effects of such stresses and deprivations can be as significant for the course and outcome of illness in the elderly as the specific effects of a particular physical or mental disorder.

We need to know more about the crisis of bereavement with widowhood, not only in the later but also in the middle years. There is some evidence of a greater likelihood of death for widowed persons, at least for several years following the stressful event. Generally, there are more women than men among depressed persons in their fifties and sixties; after 65, the proportions are more nearly half and half, women and men. In any case, the bereaved constitute a high-risk group that must be recognized and offered help during the period of crisis.

Retirement has profound implications for changes in an individual's social and economic status, in his interpersonal relationships, and in his self-perception and morale. Increasing evidence indicates that realistic preretirement planning improves the chances of making a good adjustment to retirement, but it appears that formal counseling and information given through printed material do not play an important part. Probably more important are discussions, planning, and decisionmaking with one's wife and immediate family. The importance of positive attitudes about one's physical health, good adjustment, and high morale is well exemplified among retired persons. Usually, the greater the number of health problems, the less one is contented with retirement status.

To believe that the elderly are unconcerned with sex is as unrealistic as to believe that children are not concerned about sexual matters. In the middle years, there may be some diminished activity, and in some women loss of youth and former beauty may arouse anxiety, while in men decreasing virility may cause anxiety about potency. But most middle-aged and elderly persons accept this aspect of living reasonably well. Studies such as those by Masters and Johnson (1966) have indicated that a satisfying sexual life can continue among older persons into the years beyond 80. Frequency of sexual relations among the elderly is highly related to availability of a spouse or other partner.

Radical environmental changes significantly affect the psychologic well-being and even physical survival of the aged. Such changes as moves from home into an institution, from institution to institution, and even moves within the community such as may be brought about

by urban renewal projects cause sharp increases in amount of illness and in deaths among the aged. Marked changes in living patterns of the aged often create profound psychologic stress that may lead to concomitant deterioration in physical and mental health (Weinberg, 1970).

The conditions associated with being admitted to an institutional facility actually create many of the stress effects that in the past have been attributed to living in an institution. Many institutional settings for long-stay patients, for example, mental hospitals and facilities for the aged, have been described as "depersonalizing" and "dehumanizing," providing limited mobility, few opportunities for close personal relationships, few social activities, and a monotonous, regimented existence that encourages attitudes of apathy, loss of spontaneity, withdrawal, and deterioration (Townsend, 1962). A number of studies and observations of elderly persons living in nursing homes, homes for the aged, and boarding homes have found these patients frequently displaying depression, apathy, decreased interest and initiative, excessive submissiveness, withdrawal, and increased anxiety. Certainly, aged persons in institutions are physically and psychologically worse off and are likely to die sooner than their counterparts in the community, but some of the reasons for this situation are similar to those that brought admission in the first place.

Selection factors are important in determining the differences between institutionalized and noninstitutionalized aged persons. Of course, those with overt psychiatric disturbances, especially those associated with depression or organic brain syndromes with evidence of intellectual deterioration, are more vulnerable to the ill effects of environmental changes. Research is needed to determine what kinds of persons function best in what kinds of institutions, if mismatching or misplacement is to be avoided, and to establish how best to reduce the deleterious effects of essential relocation (Lieberman, 1969).

Most persons regard ages 18 to 20 as "the right age" for young men; 40 to 50 is "middle age," and 65 and over is "old" (Neugarten, *et al.*, 1968). In general, we refer to the age period 65 and over as the period of senescence, without implying a deteriorating mental condition. The term "senility" generally is used to describe an elderly person who displays definite symptoms of confusion, disorientation, and memory defect. The great majority of aged persons never display symptoms of senility. They show few or no signs of memory defect or other evidence of intellectual deterioration.

For those who do show varying degrees of such changes, one can speak of "benign" or "malignant" senescence (Kral, 1970). "Benign" senescence involves a mild but not especially socially disabling physical and mental deterioration, with slight memory defects but no frank disorientation or intellectual deterioration that interferes with day-to-day living activities. In such persons, the deteriorative process, if present at all, is mild and slow to progress, and the individual is likely to live for years after he first subjectively observes such deficiencies or someone else objectively notes them. "Malignant" senescence refers to a senile process that is characterized by a fairly rapid and progressive deterioration over a period of months or several years, as evidenced by intellectual and physical decline in functional capacity. It is associated with a high probability of death within three or four years after the onset of overt symptoms.

When an old person presents symptoms indicating a psychologic problem, it is essential to differentiate those conditions that are "functional" or "psychogenic," that is, without known physiologic or structural cause, from those that are the result of organic brain disease—although in some patients both types may be present (Simon, *et al.*, 1970). The presence of functional disorder has important implications for both treatment and outcome, since it is more likely to improve with treatment. The prognostic outlook is considerably better, even in those patients with functional disorders who also show symptoms of organic brain disease. In these patients,

the organic brain syndrome is likely to be mild and may not be rapidly progressive, and the functional symptoms are potentially reversible.

2. Organic Brain Syndromes

Certain symptoms of mental illness in the elderly are the result of actual diseases of the brain. These are called organic brain syndromes or disorders, and they may be either acute or chronic. Acute brain syndromes are sometimes called delirium or acute confusional states, and are characterized by a relatively sudden onset, are transient and potentially reversible, and are associated with an acute physical illness such as infection, heart failure, metabolic disturbances, uremia or liver disease, alcoholism, or vitamin deficiencies. The patient suffers from fluctuating disturbances in memory, orientation, and intellectual functioning; his emotional state is often one of fear and apprehension; and disorders of thinking, such as delusions, or of perception, such as hallucinations and illusions, may or may not be present.

Sometimes the physical illness from which the patient is suffering is so serious that he may die from it. However, if the illness can be treated adequately, then the behavioral manifestations of the acute brain syndrome recede and the patient returns to the psychologic state he was in before the onset of the acute illness. In older persons suffering from senile or arteriosclerotic brain disease, an acute brain syndrome of short duration may be superimposed on a chronic brain syndrome of long duration. It is important to emphasize that symptoms of an acute brain syndrome are reversible, that is, are not permanent.

In contrast, the chronic brain syndromes are characterized by a slow and gradual onset, with symptoms of impaired memory, alteration of intellectual functions, and emotional instability. The two most common conditions leading to chronic brain syndromes in older persons are senile brain disease and cerebral arteriosclerotic brain disease (secondary to hardening of the arteries of the brain). Disturbances in mood (such as depression and emotional instability), in thinking (such as delusions), in perception (such as hallucinations), and in behavior may be associated with a chronic brain syndrome but do not necessarily indicate the degree of severity of brain damage. In fact, some persons with only mild or moderately severe brain damage may display severe disturbances in mood, thought content, and behavior, while patients with severe brain damage may show seriously disorganized behavior but no recognizable depression or thinking disorder.

3. Functional or Psychogenic Disorders

A person brings into old age his past lifelong experiences and patterns of reaction and behavior. Even though no overt symptoms of anxiety or depression may have been evident in younger years, under the stress of acute or cumulative losses, both physical and socioeconomic, or as the result of previous intrapsychic conflicts or new interpersonal tensions, symptoms of depression or anxiety, or somatic symptoms may develop (Roth, 1959). Depression and hypochondriasis frequently are found in elderly persons in response to an unfavorable environment, and recovery is possible if the person is removed from the stressful life situation or is given means of restoring self-esteem (Busse, 1969). Neurotic and paranoid reactions often are exaggerations of previous, lifelong personality manifestations (Lieberman, 1969).

Functional disorders may begin in the younger years and persist into old age or may recur at that time, if they are episodic, that is, if the attacks of illness are of limited duration, with periods between attacks when overt symptoms are absent. These disorders include depressions (Post, 1962), neurotic problems, schizophrenic reactions, and paranoid illnesses

(Post, 1966). Long-term follow-up studies have indicated that former neurotic and depressive symptomatology tends to lessen in intensity in senescence, although it often is replaced by qualitatively different minor emotional disorders and residual states. Chronic schizophrenic disorders, too, tend to decrease in intensity with aging. Outcome seems to be closely related to physical health, activities, and social environment, as well as to personality patterns that existed prior to the onset of schizophrenia (Ciompi, 1969).

4. Relationship of Physical and Mental Health

The significance of the direct relationship between poor physical health and psychiatric impairment, among both those in mental hospitals and the community-resident elderly, cannot be overemphasized. The elderly generally show decreased physical capacity, loss of strength, vigor, and skill, increased likelihood of chronic disabling disease such as chronic cardiovascular and respiratory disease and arthritis, and an increased vulnerability to serious illnesses related to infection, accidents, malnutrition, alcoholism, and the like. Pressing health needs also include adequate dental care, provision of dentures when needed, glasses for improvement of visual perception, and hearing aids for the deaf.

It should be noted that anticipated increases in the numbers of elderly persons in the population will bring an inevitable increase in the numbers of patients with chronic diseases and the attendant emotional problems and evidence of mental impairment. With a larger population, even if the proportion of the aged remains the same, the total amount of physical and emotional disorder in elderly persons that society will have to care for can be expected to increase.

Physical health has been found to be more relevant to psychiatric impairment than any other factor studied. As many as 80 percent of the elderly persons admitted to psychiatric observation wards in metropolitan hospitals suffer from physical illnesses serious enough to require supervision and health care. Most of these patients have organic brain syndromes, many of them have acute physical illnesses of sufficient severity as to require intensive treatment in a medical unit, and all of them require comprehensive medical care. Specific physical illnesses most commonly found are: heart failure, malnutrition, stroke, high blood pressure, respiratory infections, cancer, and neuritis (this usually is associated with chronic alcoholism). Multiple physical illnesses are frequent in this group of aged mentally ill persons which sometimes are overlooked when the overt presenting symptoms are behavioral manifestations of a confusional state.

One of the most significant concomitants of good health is the ability to get about from place to place without help. Many elderly persons are labeled "ambulatory" who in fact are not able to travel about independently because of physical disability of varying degrees. When a person's ability to "travel under his own steam is seriously impaired, he becomes dependent . . . for his simplest needs of daily living . . . [and] must be considered in a high-risk category for impending trouble" (Schwartz, *et al.*, 1963, p. 160).

Sensory defects are significant; visual defects or blindness occur in four percent of those in their sixties and 15 percent of those in their eighties; hearing defects occur in five percent of those in their sixties and 25 percent of those in their eighties. Such sensory deprivation obviously interferes to a great degree with an individual's adjustment to the world around him and is likely to increase his dependence on family and friends. While many persons react to such handicaps with a reasonable degree of acceptance, others may become severely depressed, and in the case of deaf persons it has been noted that paranoid ideas may develop.

There are marked differences between those aged mentally ill who are sent to hospitals and those who are just as psychiatrically impaired but are able to adjust in the community and avoid institutional care (Simon, *et al.*, 1970). Even the more psychiatrically impaired in the community are relatively self-sufficient and this helps them to avoid hospitalization despite the presence of severe psychiatric symptoms. Nor do these community-resident aged suffer from as much serious physical illness. That these two groups are different with respect to physical health was demonstrated by a study showing that two years after the initial evaluation, 44 percent of the hospitalized group but only six percent of the community-resident mentally ill group were dead (Simon, 1970).

5. Special Problems

Special mental health problems relating to the aged include alcoholism, drug dependence, suicide, and nutritional problems associated with psychiatric symptoms.

In a sense, alcoholism is the most common form of drug dependence. It is not as serious a problem among the aged in the community as it is in younger age groups (the peak of the problem occurs in the age group 34-49) and is not as frequent among women as among men (Knupfer and Room, 1964). But it is a significant problem among those aged who are admitted to hospitals as mentally ill and many of those who live in residential hotels. Studies indicate that almost one-fourth of such patients admitted to mental hospitals are suffering from alcoholism to a significant degree (Whittier and Korenyi, 1961; Simon, *et al.*, 1968). The majority of these have been alcoholics for many years, beginning before the age of 60. About one-fourth of the alcoholics in this age group, however, began their excessive drinking after the age of 60 because of various stresses associated with the problems of aging. A large number of aged alcoholics do not appear in the statistics of mental hospitals because they are routinely sent to jail instead of to hospitals, largely because hospitalization is not made available to them and jail is the only alternative if they are to receive necessary immediate protective care (Epstein, *et al.*, 1970). Certainly, the jail is not an appropriate place for the treatment of alcoholism, but unfortunately society has long used the correctional system to hide the lack of therapeutic programs and facilities.

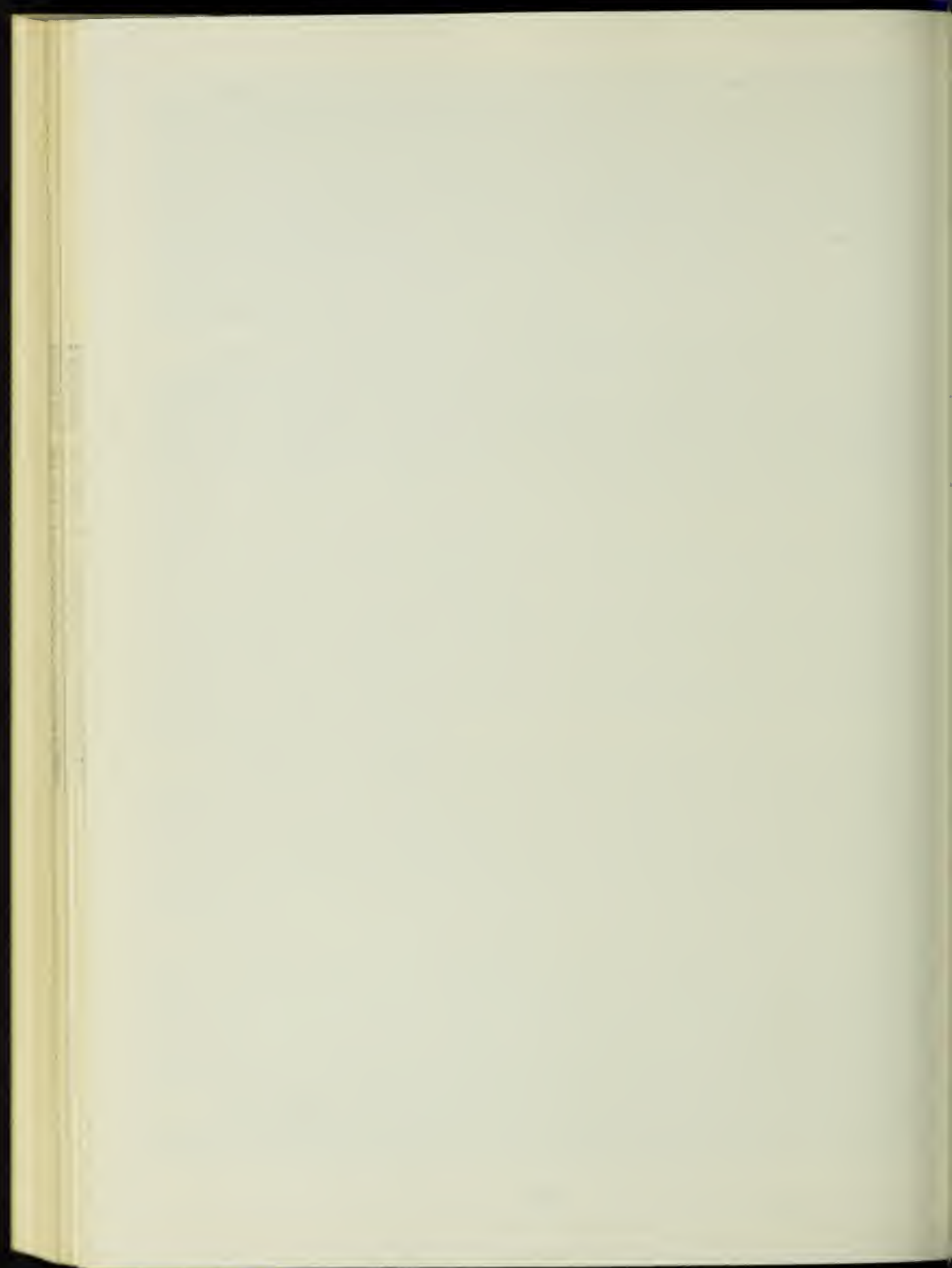
A problem that is related to alcoholism in the aged is that of crime in this age group (Epstein, *et al.*, 1970). In 1967, there were 4.2 million arrests of persons aged 18 and over in the United States, but only 5.4 percent of these were of persons over the age of 60. Among the elderly, almost 15 times as many men as women are arrested, and almost all of these are for drunkenness, indicating a mental health problem rather than strictly a crime problem. Sex crimes are for the most part minor nuisance offenses, often taking place within the home. The stereotype of the "dirty old man" who molests children is quite unjustified, as these cases are extremely rare.

Some elderly persons become excessively dependent on hypnotic drugs to induce sleep or to relieve tension and may develop a barbiturate or tranquilizer habituation. Such persons often use severe insomnia or pain as a justification for their use of such drugs. Favorite medicines may include tonics with a high alcohol content. The insomnia may be symptomatic of a chronic depression, and the complaints about chronic pain and other hypochondriacal symptoms may be rationalizations and demands for increased attention and assistance, and efforts to control persons in the immediate environment, or they may be depressive equivalents.

Suicide occurs with fairly high frequency among the elderly, predominantly among white men, and appears to be directly related to depressive reactions and ill health. Investigators have emphasized the frequency with which physical illness is associated with suicide in the

older age groups (Sanisbury, 1962). The correlation between physical illness, depression, and suicide could well depend in part on the fear of chronic disability and dependency that characterizes many of the elderly. The seriousness of the danger of suicide among the elderly is indicated by the methods most frequently used—hanging, shooting, and drowning—and by the fact that successful attempts are more common in old age than unsuccessful ones. The highest rates for suicide in the entire population are for white male divorced persons over the age of 65. The rates in the older age groups appear to have been decreasing in recent years (National Center for Health Statistics, 1967), for reasons that are not clear. How much of the decrease, for example, might be the result of the use of antidepressant drugs, or of increased therapeutic efforts on the part of suicide prevention centers and community mental health programs, or the increased security and health care resulting from the implementation of Social Security and Medicare legislation, is not known, although all of these are possible factors.

The nutritional problems of the aged arise from multiple causes, including lack of money, inability to get out and shop, lack of understanding of good nutrition, and feelings of depression, loneliness, and apathy that contribute to lack of interest in eating and unwillingness to make the effort to obtain an adequate diet. Malnutrition in the aged can so disturb physiologic equilibrium as to produce acute brain disorders, and is especially important in the acute brain syndromes of aged alcoholics.



IV. THE PRESENT SITUATION

A. TRENDS IN THE CARE OF THE AGED MENTALLY ILL

There has been a growing trend in recent years to treat mentally ill elderly patients away from mental hospitals, both by screening in the community and making alternative placements, and by screening in the mental hospitals and discharging long-term residents to alternative placements (Simon, 1971). When hospital care is indicated, at times of crisis, the tendency is to keep the duration of hospitalization as short as possible. Discussion of the present situation in the care of the mentally ill elderly is necessarily heavily weighted in the direction of hospital and other residential care facilities. Too little attention has been given to the development of extramural programs aimed at prevention, early treatment, and social rehabilitation. Fortunately, increasing emphasis is now being given to the nonresidential and nonhospital services needed by the aged.

1. Hospital Care

The poor image of mental hospital care for the aged, in the eyes of professionals as well as the general public, has a number of explanations. Care of the chronically ill, especially the aged mentally ill, is often a frustrating experience for the professional worker, particularly when unrealistic goals are set. Such work does not provide as much professional satisfaction as treatment of acute illness in younger persons. Quick results are not always seen. Care of the aged often arouses all the ambivalent feelings a younger adult has about the prospects for his own aging, his own fears and anxieties about death, and sometimes his feelings relating to his own parents.

Mental hospitals may be many miles away from the community in which patients and their families live. Adult children often experience feelings of guilt about sending parents to a mental hospital, with the implication that they are being "put away," especially when legal procedures are involved in admission. Public support of mental hospitals is extremely variable and there often is widespread and realistic concern about the quality of care available. Feelings of shame about a family member being mentally ill also exist. Mental illness is still equated in the public mind with the stereotype of severe psychosis, and mentally ill persons too often are viewed as so deranged as to be dangerous or incompetent.

At the end of 1968, there were approximately 120,000 persons aged 65 and over resident in State and county mental hospitals in the United States; an additional 15,000 were in private hospitals, and 3,000 in Veterans Administration hospitals (Kramer, *et al.*, 1968). About one-third to one-half of the elderly patients in these hospitals were admitted as younger patients; the majority were admitted at age 65 or older.

Under Medicare, psychiatric units in general hospitals offer brief psychiatric care for a limited number of elderly patients. This would be particularly appropriate for patients with acute physical illnesses associated with mental disturbance, although the greatest need is for the care of acutely ill patients with organic brain syndromes who are now admitted to State

mental hospitals. At present, the majority of aged mentally ill patients treated in general hospital psychiatric units are diagnosed as either depressed or having paranoid reactions.

The trend toward increased use of general hospital psychiatric units as a result of Medicare came about not only because more units were developed but also because present Medicare legislation excludes hospitalization on these units (because they are parts of general hospitals) from the lifetime limitation of 190 days psychiatric hospitalization allowed under Medicare.

The question of whether geriatric patients should be placed in age-segregated units or in units in which other age groups are also treated has not yet been resolved. One study (Kahana and Kahana, 1970), indicated that mixing patients was of benefit to both age groups. However, it has also been observed that older patients on such mixed units tend to receive less attention from staff members. If one restricts a unit only to older patients, recruitment of personnel for assignment there is more difficult unless an optimistic, well organized, therapeutically-oriented milieu is developed. Moreover, different kinds of therapeutic programs are indicated for the chronic long-term schizophrenic patients and those suffering from chronic organic brain syndromes.

2. Nonhospital Residential Care

Among nonhospital residential facilities, the traditional "old age home" formerly tended to serve selected patients who were ambulatory, who showed no significant signs of mental impairment, and who had no serious physical illness. This situation has changed so that, increasingly, both long-term residents and newly-admitted residents cared for in these homes may be both physically and mentally impaired to some degree. Many old age homes have developed separate infirmary units to care for patients with transient physical illness not serious enough to require hospitalization and for patients who are too infirm to live in that section of the home where ambulatory patients are housed.

Boarding and sheltered care homes generally care for patients who are ambulatory and do not require nursing supervision but who cannot live alone, perhaps because of some degree of confusion or because they have chronic schizophrenia.

Nursing homes, as the name indicates, provide twenty-four-hour-a-day nursing care and manage patients with a variety of emotional problems and varying degrees of severity of mental impairment. Few nursing homes or boarding homes are licensed primarily for the care of the mentally ill aged. Other residential facilities include family care homes, special hotels that cater to the elderly (often in the central city), and various church and retirement homes.

Attention has been directed recently toward the need for so-called intermediate care facilities that will provide more than room and board but less than skilled nursing care to fill a gap that exists between these two levels of care. Such a facility, it is assumed, will require fewer nursing personnel, and physician's visits should be required at longer intervals than at nursing homes. There is considerable concern that if many of the mentally ill aged are placed in such institutions, standards of care will be lowered and there will be little if any support for activity, recreational, and rehabilitative programs. This would represent a move toward purely custodial care.

All residential facilities face problems of staffing, standards of care, adequacy of therapeutic and rehabilitative programs, and financial support. The quality of services provided varies enormously. Nursing homes have been under attack, as mental hospitals have been in the past, for inadequate facilities, tragedies resulting from fires, poor food, unsanitary conditions, excessive use of restraints, excessive bed care, and lack of attention to incontinence.

These problems are not necessarily universal, but there have been enough instances to create scandals and to bring about an increasing pressure for higher standards and better care.

Day care units, senior service centers, and half-way houses might also be included among residential facilities, at least on a part-care basis. There is a great dearth of day care facilities for the aged, and those available tend to be of varied kinds—social clubs, hobby and activity centers, or places where older persons have an opportunity to get together for tea or coffee or for meals. Few elderly patients are referred to day care centers that care for the mentally ill of all ages. Half-way houses may be used as intermediate placements between mental hospitals and the community.

3. Extramural Services

Outpatient psychiatric services are available in psychiatric clinics, the outpatient services of community mental health centers, day care units, and from private physicians and psychiatrists. However, these services are relatively little used by the elderly. Only two percent of psychiatric clinic patients are over age 60, and these tend to be patients in their sixties with functional disorders. The low rate of utilization of these psychiatric outpatient services is largely the result of the reluctance of patients and families to seek psychiatric help for their problems and to the image that such clinics have in the eyes of both professionals and public as lacking interest in older patients.

Other services, often included under the rubric of "protective services," are offered by social agencies, public health departments, and neighborhood health centers. Social, supportive, protective, and rehabilitative services are provided to the aged through both professional and volunteer services, including visiting nurses, social workers, homemaker services, attendant care, friendly visitors, "Meals on Wheels," information centers, senior citizens' centers, arrangements for daily telephone communication, and the like, and through certain legal aid agencies. Again, the availability and utilization of such services vary enormously, as does the quality of services offered. Nowhere are they adequate to meet the need, if the aged are to receive the help they require in order to remain in the community.

Protective services often are directed toward those aged persons outside mental hospitals who are deemed either marginally competent or incompetent to manage themselves and their own affairs in a socially acceptable fashion, and who have no concerned and competent relatives, friends, or agents to do it for them. However, even if such persons do receive protective services, it may not lessen the likelihood of hospitalization (Blenkner, 1967).

A significant number of elderly persons are so gravely disabled as a result of organic brain syndromes, and sometimes of functional disorders such as severe depressions or paranoid reactions, that they are unable to maintain themselves adequately and safely. In such instances, in many States the court may appoint a conservator, upon the recommendations of physicians that the patient is thus gravely disabled. Upon the recommendation of the conservator, the patient can then be placed in an appropriate facility—not necessarily a mental hospital—for care and treatment. Such placement is done on approval of the court but without going through formal court procedures requiring the presence of the patient, unless this is requested by the patient. Certainly, in accordance with constitutional rights, the opportunity for a judicial hearing and jury trial if requested must be freely available for any person of any age.

The isolation that is forced upon many elderly persons as a result of losses, physical disability, and economic deprivation has been considered an important factor in precipitating mental illness. In many cases, physical illness may indeed be critical to late-developing isolation

of elderly persons and to subsequent mental illness. But a number of severely isolated persons living in the community probably owe their avoidance of hospitalization to their very isolation. These "socially invisible" elderly persons can be seriously impaired both physically and mentally, but as long as they retain sufficient functional capacity for daily living, their avoidance of contacts with other persons acts to protect them from notice by those who might recognize their need for hospitalization (Lowenthal, 1964).

4. Factors Affecting Placement and the Use of Services

Hospitalization or placement in alternative facilities is more often related not to the severity of illness or to the particular needs of the patient, but to other factors such as availability of services, admission policies, attitudes of professional personnel, and the availability of financial support in one or another placement facility. The result may be what is often called "misplacement" of elderly patients, especially with respect to whether their illness is predominantly physical or mental and whether they are placed accordingly in medical or psychiatric facilities. Such misplacement has been identified and its effects—particularly toward increased morbidity and mortality—discussed by several investigators (Kidd, 1962; University of Rochester School of Medicine and Dentistry, 1968). The very old, the single and widowed, and those of very low socioeconomic status are most likely to be misplaced.

The real problem, however, is not so much one of misplacement as one of inadequacy of care in whatever facility the patient is placed. If comprehensive care is available in all settings in which the elderly live, it will not be possible for misplacement to result in inadequate care. Homes for the aged must have medical and mental health consultation available; psychiatric wards in State and county mental hospitals must provide intensive medical care by physicians and nursing personnel for elderly patients with acute physical illness; general medical wards treating elderly patients must have mental health consultation and supervision available for patients needing such care.

Five categories of factors influencing hospitalization of elderly mentally ill patients have been identified (Lowenthal, 1964). These factors can be considered as both precipitating and predisposing factors, that is, precipitating factors that lead directly to the decision to seek hospitalization, and predisposing factors that are believed to be causally related to the precipitating factor but are not in themselves enough to force hospitalization. These categories are:

- (1) Disturbances in thinking and feeling, such as delusions or depression.
- (2) Physical illness.
- (3) Potentially harmful behavior, such as confusion or unmanageability.
- (4) Harmful behavior, such as refusing necessary medical care, or actual violence to others.
- (5) Environmental factors, such as the unavailability or incapacity of a responsible other person to care for the patient.

Among the predisposing factors, disturbances of thinking and feeling, and physical illness are the most frequent; among precipitating factors, potentially harmful behavior, environmental factors, and harmful behavior are the most frequent. Thus, while from a medical viewpoint physical illness may have important effects on a patient's behavior, for the family it is the behavior itself that leads to the decision that hospitalization is necessary. Disturbances of thinking and feeling apparently are much more easily tolerated in the community than are behavioral disturbances. Studies have established that aged patients are not "railroaded" into mental hospitals or "dumped" by their relatives, nor does the evidence indicate that children have rejected their parents or families their aged relatives (Blau, 1970). In many instances, one or more alternatives have been tried, until a crisis occurs requiring recommendation by a physician for admission to the hospital. In general, families accept psychiatric hospitalization only as a last resort and in general display tremendous tolerance for the problems of aged family members.

5. Community Mental Health Centers

The evolution of community mental health concepts (Felix, 1957) has led to today's trend to place a good share of administrative responsibility for developing services that are specific to a local area on the community itself, on the city or county levels—or both—and including the private sector. The cost of such programs is so large, however, that various funding mechanisms have been developed that involve Federal, State, and local community sharing of costs. An example is the community mental health centers. The Federal Government has given gradually decreasing support for the construction and staffing of the centers. With the enactment of the Community Mental Health Centers Act (Public Law 88-164, 1964; Public Law 89-105, 1965; Public Law 89-105, 1966), the mental health groups in this country were given a mandate to provide comprehensive mental health services for the prevention and treatment of mental illness and the rehabilitation of the mentally ill. By mid-1969, more than 200 of these centers were in operation (Beigel, 1970).

In planning for the operation of such centers, it is essential that the actual needs of the aged in the particular area to be served are known. Thus, the number of aged in the community, demographic data about them, and a statement from a sample of the aged as to how they see their own needs, are essential for planning, in addition to the information obtained from professionals in the area. An advisory board involving community leaders and professionals, and including representatives from the group of aged, would allow free communication between the providers and consumers of mental health services. It is important that the aged be encouraged to assume responsibility for their own health care, always keeping in mind that the elderly mentally ill may not be capable of doing so because of the degree of mental impairment. Services currently available and additional services needed must be documented and placed in appropriate priorities for implementation. The aged have not been of high priority to the community mental health centers: they have been underrepresented among users of the centers, and there are few programs giving special attention to their needs.

An administrative structure that clearly defines lines of communication, responsibility, and authority, with one professional person named as the coordinator for mental health services for the elderly, is necessary. A patient's "advocate," "coordinator," or "community aide" can be useful to see to it that the recommendations made are carried through. Attention must be given to the development of adequate inservice training for professionals and allied health workers, this training to include attention to the psychosocial problems of the aged.

Community mental health centers must work in close cooperation with general hospitals and State mental hospitals, with the private sector of mental health care, and with various full-care and part-care alternative facilities. Even if mental hospitals are some distance away from the patient's community, some consider that the final responsibility for patient care rests with the local community—and if and when a patient leaves a mental hospital to return to the community, a coordinator or advocate should be available in the local community to see that follow-up care is made available, including psychiatric, social work, nursing, rehabilitative, and supportive services.

B. RESEARCH AND TRAINING

There are important gaps in present knowledge relating to mental disorders among the elderly, and present research programs leave much to be desired. There is urgent need for more information on which to base programs, for facts on:

- (1) The incidence and prevalence of mental disorders among the elderly.
- (2) The effectiveness of specific types of preventive, ameliorative, curative, and rehabilitative services presently offered to elderly persons in and out of institutions.
- (3) The most effective and economical ways of delivering services, and the programs, facilities, and personnel needed to do this.
- (4) The quality of medical and mental health care given elderly persons in all types of institutional settings and in the community, and the extent to which needs are met.
- (5) Family process in families with an aged mentally ill member; intergenerational group dynamics, ethnic and cultural differences; and the influence of family environmental and health crises on psychologic equilibrium.
- (6) The best methods of training both present health professionals and new types of personnel who can work in specialized areas, in ghettos, with minority groups, and the like.

Increasingly, paraprofessional workers are being recommended for community mental health work. The few there already are may be involved in casework, group therapy, or after-care; they may act as advocates or coordinators; or they may work in community organizations—tasks that professionals have generally considered only themselves qualified to carry out. Yet, such workers find few opportunities for advancement and feel themselves to be in dead-end jobs. Many professionals support the use of these paraprofessionals in work with the poor, with minority groups, and with persons in ghetto areas, believing that such workers may be better understood by people of their own socioeconomic background and so be better able to help them. If this is so, then they have abilities that must be adequately compensated.

Most patients regard the health team as including the physician, dentist, nurse, and pharmacist. In recent years, however, a whole series of allied health professionals has grown up—dietitians, physical therapists, laboratory technicians, and, in the mental health field,

psychiatric technicians, psychiatric social workers, psychologists, occupational therapists, rehabilitation therapists, vocational counselors, group workers, and various types of so-called "indigenous workers." In the general health field, many of these personnel, such as laboratory workers, and electroencephalographic and electrocardiographic technicians, carry out largely technical jobs. Others are involved in primary care of the patient, usually but not always under what is called the "general supervision" of the physician. This situation is quite common in the mental health field and has expanded greatly in the last 25 years. As a result, considerable role diffusion has occurred among such professional groups, some of them carrying out psychotherapy under such names as casework, counseling, group work, and group therapy. In the mental hospital such work is done under the general supervision of the psychiatrist, who assumes medical responsibility; but in the community, direct medical supervision is not always practiced.

Training needs include programs for professional, allied health, and caretaking personnel, and educational programs for the general public—specifically for the middle aged, the elderly, and their families, including the use of telephone, radio, and television to reach the elderly. Relatively little attention is presently being given to geriatrics in professional training. Indeed, studies have shown negative attitudes toward the elderly as patients existing among medical students and nursing students (Spence, *et al.*, 1968). Too often, courses on human development stop with adolescence, ignoring or paying too little attention to many aspects of the life cycle, including adult development and change through age, including problems of death and dying.

Training programs for caretaking personnel such as operators and administrators of nursing homes and for health personnel and other workers in residential facilities are very limited. Especially important are inservice training programs with the involvement of psychiatrists, psychologists, social workers, nurses, and rehabilitation therapists. Some attention has been given to "new career" programs for indigenous workers in the health field, and more such innovative programs will be needed, both to fill manpower needs and to upgrade the qualifications of workers already in the field. More use could be made of the elderly themselves: healthy and active older persons could work with and assist the handicapped and isolated elderly and could act as advocates to assist them through the maze of bureaucratic procedures they often must face to obtain needed services.

Relevant research includes work in the basic sciences, behavioral sciences, and clinical sciences, and in health administration. Unfortunately, a relatively small amount of research money and time is now being devoted to investigations relating to geriatric mental health and illness. More basic research is needed to extend our understanding of the aging process in its biologic, social, and psychologic aspects. Certainly, a research expenditure of less than one percent of all expenditures of the Federal Government for health care of the aged is insufficient for such an important field.

C. SPECIAL PROBLEMS AND GAPS IN PRESENT SERVICES

1. Discontinuity and Fragmentation of Care

The problem of continuity of services for the elderly involves both the utilization of the private sector of health care and the action of political subdivisions—city, county, State, and Federal—and the attendant question of who will have the responsibility and authority for delivery of services and of sharing the burden financially. It is rare, indeed, to find in any community an adequate coordination of services and agencies involved with programs for the older

population. There is too often overlapping of responsibility and authority, duplication of services, and shifting of patients from one agency to another, with fragmentation of available treatment resources, difficulty of communication at the professional level, and a sharp separation of outpatient, inpatient, and aftercare services which are not in the best interest of patients.

An approach is needed that will make certain that a patient will remain under the care of a physician or of a group of professionals, regardless of the need for movement from one type of service to another. There is at present minimal continuity of this sort, and little or no follow-up of patients who have received services or have been referred for services either in the community or in residential care facilities. Such a coordinated program requires a leader who is in a decisionmaking position and who is invested with authority. It needs as well a wide range of services—whether the programs and facilities are under one roof or in one geographical area, with satellite units to deal with special problems (such as neighborhood information centers in minority group areas or social clubs in hotels for the elderly), or whether coordination, integration, and continuity of services are sought among the various operating units now in existence.

2. Inadequacies in Residential and Outpatient Programs

The Department of Health, Education, and Welfare Task Force on Medicaid and Related Programs has noted that:

access to basic medical care shall be a right or entitlement of all citizens . . . [that] is not fulfilled when millions in the population do not know about or cannot get to the places where care is available, or when the millions who do get to such places are given a kind of service that is woefully inferior by every standard known to man and doctor. Nor is right and entitlement honored just because physicians and hospital administrators can say, 'We never turn away a patient.' However virtuous the declaration may make the doctors and hospital people feel, it does nothing to make good the right or entitlement for those who never get within sight of a doctor's office or hospital (U. S. Department of Health, Education, and Welfare, June 1970b, p. 2).

Inadequacies in present programs of all kinds arise from difficulties relating to too few facilities, manpower shortages, lack of adequate financing, lack of training programs for care-taking personnel and of educational programs for the public, and program deficiencies resulting from both lack of knowledge about the best programs to support and from lack of personnel to offer programs. Inadequacies exist in all types of residential care facility and extramural programs, including protective services, outpatient care, day care, rehabilitative programs, and mental health consultation; community involvement; services for the mentally ill in rural areas; and social work services and activity programs in all kinds of residential facilities. It would be hard to point to an area in the field of care of the mentally ill aged where services could be judged adequate in quality and quantity. Many professionals have regarded care in mental hospitals and in nursing homes and boarding homes as essentially "warehousing"—indicating a custodial and nontherapeutic environment. Nursing homes too often are isolated from the mainstream of medical care and from the community in which they are located. Many patients are confused, mentally impaired, and emotionally disturbed, yet mental health consultation is infrequently requested.

Adequate data are not yet available on which to base a judgment regarding the relative merits of State mental hospitals and alternative placements with respect to the longrun course and outcome of mental illness in elderly patients. One study (Epstein and Simon, 1968) compared two groups of elderly patients: one group received preadmission screening services and went mostly to nursing and boarding homes, while the other group was admitted directly to the psychiatric observation ward of a general hospital and went from there mostly to State mental hospitals. It was concluded that while there was a serious question as to the adequacy of rehabilitation programs in the nursing homes, a clearcut preference for either alternative placements or mental hospital placement had not yet been justified. The effects on families of forcing home care of an aged mentally ill person rather than some kind of institutional placement must always be given serious consideration (Grad and Sainsbury, 1968).

All levels of government must participate in the setting of standards of care, including suitable and adequate architecture, and safety, fire, dietary, rehabilitative, social activity, medical, mental health, and other caretaking and therapeutic services. Specific qualifications are needed for the administrators and operators of all types of institutions where the elderly receive care and treatment.

If one assumes that responsibility and authority should be placed in the local community for setting standards for mental health care programs—preventive, therapeutic, and supportive—for the elderly, there remains the question of minimum standards that should be required of all such facilities and programs, for every State and every community. If one sets standards on the basis of how programs are operating now, they may be too high for some and too low for other areas. If set too high, and mental health manpower in certain locales (especially in rural areas) is scarce, it may be impossible to meet minimum standards. Manpower needs must be defined and appropriate training programs developed in areas where the need is greatest.

It may be argued that minimal standards, if Federal financing is part of the program, should be set at the Federal level, but in any case, rewards for improving standards should be built into the system. Although the States are receiving increasing financing from Federal sources, perhaps standards might better be set at the State than at the community level in order to provide a more uniform system of at least minimally adequate care throughout the State. If standards are set at the local level, problems will occur because of deficiencies of financing at higher standard levels and because there will be variability from one community to another. Increasing emphasis is needed on setting standards for programs and numbers and quality of personnel, in addition to general public health and safety standards. Supervisory safeguards must be built in such a way as to insure that standards are in fact met.

3. Effects of Medicare and Medicaid

Recent legislation has had noticeable effects on the provision of mental health care to the aged, as these patients are eligible for a broad range of psychiatric services under Medicare and Medicaid. But the emphasis in the legislation on active rehabilitation for the acutely ill poses certain problems in relation to the care of the mentally ill aged (Gibson, 1970). Although broad benefits are provided, certain provisions in the law hamper modern psychiatric treatment of the elderly, especially those provisions that limit care in various day care programs, outpatient and home visit programs, protective care, and other such resources that may be particularly appropriate for elderly patients, and may prevent hospitalization.

4. Financing Mental Health Care for the Aged

If one accepts the thesis that good health care is a right for everyone, and not just a privilege for some, then it becomes necessary to provide some kind of easily accessible comprehensive health care program, without regard to ability to pay. This is particularly important for the elderly, so many of whom fall below the poverty level. Several ways of accomplishing this can be considered, including: plans that follow social insurance approaches providing almost universal coverage; extension of the Medicare approach to the population of all ages; provision of tax rebates to reduce the costs of private insurance, especially for low income groups; and insurance specifically for the poor, to finance costs of catastrophic illness.

Traditionally, the financing of care for the geriatric mentally ill, as for most of the mentally ill, has fallen largely to the States, and to a smaller degree to local community governments. For many years, the more overtly mentally ill and mentally disturbed aged were sent to mental hospitals, to the extent that as many as one-third of the admissions to mental hospitals were patients aged 65 and older (Kramer, *et al.*, 1968). At the same time, those elderly patients who were apathetic and did not constitute behavior problems, even though mentally impaired, were admitted to other residential care facilities such as nursing and old age homes. More recently, there has been a trend away from the use of mental hospitals to the use of other kinds of congregate living facilities for these patients.

While the responsibility for providing services, setting standards, and planning for the care of the mentally ill is increasingly being shifted to local communities, particularly with the development of community mental health centers, funding the care of the aged has largely become a shared responsibility between the Federal Government through Social Security (Medicare and Medicaid) and State and local communities. Local communities and State government alike are finding it increasingly difficult to support these services in addition to all other health, welfare, and educational programs. It is becoming more and more evident that a crisis in funding has occurred.

As a result, the States under Medicaid legislation are setting more limits and restrictions on eligibility for indigent and near-indigent persons in need of medical care, such persons including the aged and the aged mentally ill. Cutbacks are being made in funding support for aged patients placed in nursing homes, intermediate care facilities, and boarding homes, and for outpatient and supportive services. If these cutbacks continue, the minimal custodial care now being offered in most of these institutions will be further reduced in quality, and there may again be an increased admission rate of aged mentally ill patients to State mental hospitals.

Medicare and Medicaid were intended to remove the economic barriers to quality medical care for the aged and poor, and, although mental health care was not emphasized in the legislation, the inclusion of psychiatric benefits represents a significant precedent in financing care of the mentally ill. However, certain concerns of Congress are reflected in special limitations that were placed on Medicare and Medicaid benefits for the mentally ill so as to restrict the use of such benefits for long-term custodial care, which is commonly associated in many minds with mental hospital care, especially of the aged (Rice, *et al.*, 1969). These limitations are definitely discriminatory, so far as the mentally ill aged are concerned.

Under the Hospital Insurance Program of Medicare (Title XVIII, Part A), there are no special limitations on psychiatric treatment given in a general hospital (including the psychiatric unit of a general hospital), but inpatient services in a psychiatric hospital are limited to 190 days during a person's lifetime. In addition, this lifetime restriction is subject to the benefit period provision applicable to all hospital care under Medicare. Under the Medical Insurance Program of Medicare (Title XVIII, Part B), covering physicians' services, there is a limitation

on the amount Medicare will pay for outpatient psychiatric services, wherever provided. Also, Medicare payments to physicians for such services cannot exceed 50 percent of the charges and can be no more than \$250 in each calendar year. This limitation does not apply when the patient is an inpatient in a hospital or nursing home. In any case, it should be noted that this supplementary insurance is becoming increasingly expensive to the aged person, who must pay a premium that now amounts to \$5.60 per month, placing it beyond the means of many on small fixed incomes.

Medicaid (Title XIX) provides Federal sharing of financing of most types of care for the mentally ill aged, including those in mental hospitals. In addition, elderly patients are able to receive direct assistance payments while in mental institutions. In order to receive Federal participation in payment of care for patients aged 65 and older in psychiatric hospitals, States must agree to adopt certain special provisions of the Long Amendment that require, among other things, providing evidence of State effort in the funding of mental health services, progress toward the development of comprehensive mental health programs, and the provision of alternatives to inpatient hospital care. Patients must meet the eligibility requirements for medical assistance.

Studies conducted by a Department of Health, Education, and Welfare Task Force show that in the 18 months after the implementation of the Medicare program (July 1, 1966), there was a significant increase in the use of general hospitals by aged psychiatric patients (Cooper, 1969). Psychiatric patients of all ages constitute a very small proportion of the total general hospital population, however. The greatest impact of Medicare was in the shift of source of payment from private (out-of-pocket and insurance) to public financing. Medicare and Medicaid have become the sources of payment for 90 percent of the discharges and 89 percent of the days of care for patients aged 65 and older. A substantial portion of mental hospitals in the United States are participating in the Medicare program: about 69 percent of all mental hospitals in the country as a whole, ranging from 85 percent in the Western States to 56 percent in the South. Annual Medicare payments to psychiatric hospitals amounted to about \$25 million in 1968.

Many groups have recommended the elimination of the 190-day limit on care in psychiatric hospitals. It should be emphasized that when a patient is receiving long-term care in a hospital, this does not necessarily mean that he is receiving only custodial care, and medical as well as psychiatric care often is provided in psychiatric hospitals. The recommendation has been made, also, for changes in the legislation to allow the participation in Medicare of free-standing community mental health centers.

The Medicaid program offered a real potential for improving services to the aged in State mental hospitals. Congress, in passing the special provisions for the aged, intended that Federal matching funds would be used by the States to improve services, not only in the hospitals, but also in the communities. Unfortunately, some States have not fulfilled their obligation to use the Federal funds for the improvement of services for the mentally ill aged. In view of the fact that more than \$450 million in Federal funds have been allotted to the program since 1965, there is a vital need to assure that Federal funds are utilized for the purposes intended, and that appropriate actions be taken by the Department of Health, Education, and Welfare to assure that these goals are attained.

Although medical assistance payments have become a major resource for payment of care of elderly patients in mental hospitals, there is considerable variation among the States in program implementation. In some States, payments to mental hospitals have been returned to the mental health program to pay for improvements and additional staff within the hospital and in the community mental health programs. In other States, this money has gone to the

general treasury, and equivalent increases have not been reflected in the mental health budget (Group for the Advancement of Psychiatry, 1970).

An important need is for improved documentation of services provided and payments made. There has been no consistent data-collection system for numbers of patients in the program, types of care provided to individual patients, status of periodic reviews, and reimbursement collected. There is a particularly great need for specific information on what happens to patients after they leave the mental hospital and are placed in nursing homes or other alternative care facilities.

There has been an increasing development of various sources of payment for mental health care services and an improvement and development of insurance programs that recognize that mental illness is as insurable as any other illness. Even so, there was in the original Medicare legislation, and in subsequent amendments, a tendency to consider mental illness as different from other illness, for purposes of insurance. And, although private insurance may be available for mental illness, it is in many cases discriminatory and characterized by limitations and deductibles so that it cannot meet the needs of a patient with a protracted illness. The cost for such insurance is often so high that many aged persons cannot afford it.

Current therapeutic concepts and practices stress the importance of a variety of treatment modalities that should be available as inpatient, outpatient, and preventive services, with emphasis on a short period of inpatient treatment combined with maximum utilization of community living, supportive and protective care, and outpatient treatment. This is especially appropriate for elderly patients, both those with acute illnesses and those with chronic disorders. It is generally agreed that if preventive services were provided under Medicare, the incidence of acute illness would be reduced, and so would the need for hospitalization. Supportive and protective services, home aid services, legal services, and home care would thus help to avoid costly institutional care. A system of adequate and coordinated support would help to prevent moves of patients from one facility to another because of financial expediency. Also, since old persons suffer severely if they cannot buy dentures, eyeglasses, or hearing aids, financial support for these devices should be provided; the perceptual and sensory deprivations caused by impaired vision and hearing may lead to serious psychologic problems.

Even though Medicare payments for aged patients in mental hospitals now amount to about \$25 million a year, with Federal payments to mental hospitals under Medicaid amounting to about \$140 million a year, these programs fall far short of underwriting the full range of services needed. The present limitations imposed by Medicare legislation restrict the pattern of care and availability of services for persons with mental illness, as they do not for persons with other illnesses.

D. PROGRAM NEEDS

1. Comprehensive Care

The elderly, like persons in all age groups, need comprehensive and continuing health care, which includes not only:

the diagnosis and treatment of illness but also its prevention and the supportive and rehabilitative care that helps a person to maintain, or to return to, as high a level of physical and mental health and well being as he can attain (American Medical Association, 1966, p. 36).

Comprehensive care requires the active participation and motivation of the patient, who must develop a sense of responsibility for his own health rather than adopting a passive role and wishing the burden of responsibility to be assumed by a physician or an institution. This requirement poses a special problem for the aged mentally ill as well as for the many elderly persons who are isolated, who rarely initiate efforts to seek medical care until a crisis arises, and who are faced with serious financial and transportation problems in relation to seeking health care. "Outreach" programs are crucial for these individuals. Trained indigenous workers might be particularly helpful in encouraging such persons to seek needed help.

The growing emphasis on "consumer participation" in health care brings with it both advantages and problems. It is disturbing for professionals to be faced with the demands of consumers; it is disturbing for both professionals and consumers to be uncertain of what is expected of them. There is much need for time spent in a mutually educational process.

Whatever the organization of health care, it must give serious attention to both the physical and the mental health needs of the aged population. Ideally, programs are required that will: clearly define the needs and identify the gaps in present services; provide adequate and high quality services; make services easily available, geographically and financially; assure that services are comprehensive, efficient, and coordinated; include appropriate training programs to provide the professional and allied medical personnel to implement the programs; and support research, both basic and applied, necessary to advance knowledge (U. S. Senate Special Committee on Aging, 1970).

Special goals for mental health programs must be tied to comprehensive general health goals, which include adequate casefinding, the identification of psychosocial and health needs, and the development of adequate programs to meet these needs wherever they exist. Because of the close correlation between physical health and mental health, adequate physical health care is one of the most important aspects of preventive care available to us today against mental illness in the elderly.

Since mental and physical health are inseparable, and this is especially obvious in the aged, it can be argued that mental health and physical health services should not be separated. An alliance of mental and physical health services would provide more opportunity for training of all health personnel in the psychosocial problems of elderly patients, with whom all in the health professions must deal. If well organized and integrated, a combined program would reduce fragmentation and duplication of services. Proper epidemiologic studies could identify medical and psychiatric problems and social and economic needs, and result in better understanding of the relationships among these problems and needs.

Regional medical programs are being developed throughout the country, especially in such categoric areas as heart disease, stroke, and cancer. The concept of such programs is being applied increasingly on a Statewide and regional basis to encourage the development of regional comprehensive health centers. This concept in itself more than implies that problems associated with mental health and mental illness should be an integral part of a comprehensive regional health plan.

At the same time, many mental health professionals are fearful that if mental health services are part of Statewide or even local overall health services, the tremendous mental health needs, neglected for so many years, will not receive the attention they deserve. If mental health services are submerged in overall health programs, they certainly will not have the visibility of separate agencies, and the aged mentally ill, a deprived group even within the field of mental health, might be even worse off. However the problems of organization are resolved, special attention will be needed for programs for the aged. Their needs must be emphasized by the organization of specific divisions of aging or identified separate units labeled as mental health

units for aging. Such administrative divisions should be devoted to the coordination of physical and mental health services and programs for the aged, consultation on problems of the aged, program evaluation, manpower training, and research. Experts on mental health aspects of aging must be represented in such units in order to achieve necessary coordination and integration.

It has been said that psychiatry has "left the mainstream" of medicine, and non-psychiatrists may feel that its inclusion in an overall health care program will "bring it back in." It might be said, also, however, that physicians in other areas of medicine might do well to become as interested in the psychosocial problems of their patients as psychiatrists are.

It has been claimed, too, that because with the elderly mentally ill "the danger to life lies more in the physical" than in the psychiatric components of disease, a geriatric program is better associated with a medical than with a specifically mental health organization (The President's Task Force on the Mentally Handicapped, 1970). The recommendation was made, however, that a psychiatrist should be readily available for consultation and treatment. The Task Force also recommended as a long-term goal:

The establishment of community-based geriatric programs, each serving a defined geographical area and providing diagnosis, short-term treatment, and placement. Though separately funded and staffed, these should, wherever possible and appropriate, be affiliated with a comprehensive health center and include psychiatric consultation services. In other facilities and programs now caring for the aged, adequate health care and psychiatric consultation services must be available (p. 2).

Rather than a long-term goal, however, this might be considered a short-term goal, and is being implemented now, in part, at least, in some community mental health centers. The Task Force recommendation ignores the fact that up to 25 percent of the community-resident aged may suffer from emotional and mental impairment and that a significant number of the aged mentally ill now reside in mental hospitals or are being transferred to residential care facilities from the mental hospitals.

It has become a truism to emphasize the holistic approach to patient care, and such an attitude is inherent in the concept of comprehensive medical care. Mental health personnel have a strong investment in overall coordinated community care, especially as exemplified in the operation of good community mental health centers. Comprehensive regional health programs will need leadership with sufficient investment in mental health problems and a realization of the importance of mental health matters in any such program, if proper emphasis is to be placed on the mental health field and it is not to be relegated to the low priority status it has too often held in the past. Specialists in aging are few in any clinical field, including psychiatry. It is particularly important that the basic concepts of human development, geriatric medicine, and gerontology be included in the training and experience of all health professionals, so that planning and implementation of programs for the aged, wherever this takes place, will be on a sound basis.

The age group we call the "elderly" like all age groups is made up of individuals. The elderly mentally ill do not constitute a homogeneous group, and the existence of individual differences as well as such differences as those between ethnic groups, varying socioeconomic levels, circumstances, needs, and desires, must be recognized when services are planned for the elderly. Programs must have as their aim the preservation of the older person's personal dignity, the treatment of individuals according to their needs and as far as possible their wishes, and the development of their potential according to their capacities.

Geriatric patients in State mental hospitals, especially, are too often regarded as a single group, whether their behavior and interpersonal problems stem from organic, functional, socioeconomic, or interpersonal problems, or combinations of these. First admission patients too often are treated in the same unit and in the same way as other patients in the same age group who have had many admissions or have been long-term residents in the hospital. Organic diagnoses are often made on the basis of age, and such patients are relegated to more or less custodial care, with little attention to aspects of their illness that may be potentially reversible.

Increasingly in recent years, it has been popular to say that aged persons who are not mentally ill or dangerous to themselves or to others are being committed unnecessarily. Such cases often are described as "harmless seniles." But they are not always, by any means, not dangerous to themselves. Their confusion, disorientation, and memory defects may be so severe that they get lost, incur accidents, or are unable to feed themselves, and they need protection. They are suffering from organic brain disease and they often have serious chronic physical illness. To admit them to inadequately staffed nursing, boarding, or family care homes or to some sort of intermediate facility without comprehensive examination to determine accurate diagnosis and appropriate therapeutic procedures (since in some instances some or even all of their apparent confusional state may be reversible) cannot constitute proper and humane care. The real problem is not related to commitment policies and procedures but to the need for a clear definition of adequate care and treatment for these patients.

It is widely held that the elderly mentally ill are better off in their own homes, maintaining themselves or being assisted by family members. The patient and his family, however, must be allowed to participate in the final decision about home care versus institutional care. Families vary in their willingness and ability to care for their aged mentally ill members, who often are physically ill also. But often the decision for institutional placement is forced by lack of supportive services in the community (Grad and Sainsbury, 1968). It has been noted, too (Goldfarb, 1967), that psychiatrists, other physicians, and welfare agencies may at times underestimate the burden that elderly patients place on their families and may tend to exert pressure to keep them at home. It is certainly true, however, that families frequently prefer to care for their elderly relatives at home, in spite of the problems this raises (Sainsbury and Grad, 1963). Many families would be quite willing to care for a confused and mentally ill person at home if they knew that quick assistance would be available from professions if circumstances required—up to and including hospitalization. Community provision of services of all kinds can make it possible for families to choose an alternative that best suits their situation. Depreciation of institutional care *per se* is a disservice to the elderly and their families. Institutions are one important point in the continuum of care for the aged, to be used when appropriate.

For the right person, the right family, and at the right time, it is the right service. It can represent positive change—security, permanence, medical care, increased comfort and well-being, and relief to all family members from emotional, physical, and economic strain (Brody, 1970).

In sparsely populated areas and States it is much more difficult to develop special geriatric programs. It becomes necessary for neighboring communities and counties to deal cooperatively in setting up programs for the aged mentally ill. In such areas, transportation is necessary to bring patients to the central facility for examination and treatment, or traveling teams of mental health specialists must make regular visits to areas where help is requested.

In metropolitan centers, consideration may be given to the development of large multipurpose facilities for the care of the aged, whether they require placement in a mental hospital,

in nursing, boarding, or old age homes, or need other services. Whether such facilities are housed under one roof or various aspects of the program are distributed among various facilities depends on the present availability of such facilities and the ability of the community to organize them into a well-functioning, coordinated whole. In any case, smaller satellite units may be necessary in special areas where minority groups live, so that aged patients can communicate with individuals who are well-versed in the health folklore of such specific groups. These could be part of public health clinics, senior service centers, information centers, and the like.

Where large multipurpose geriatric facilities are developed, they must take into consideration both individual and group differences pertinent to the care of the aged. There are fundamental differences, for example, between patients who are depressed, paranoid, alcoholic, or have other functional disorders commonly seen in the age group 65-74, and patients 75 and older who are suffering from organic brain syndromes. The younger and older types of aged patients require different types of therapeutic approach.

Large facilities in general tend to have less interpersonal contact between staff and patients but often can offer a variety of programs and services that a smaller unit may not make so easily available. An advantage of the large multipurpose geriatric center is that as a patient's condition changes, moves from one level of care to another are more easily made, both geographically and administratively. When services are scattered in the community, moves from one institutional setting to another are more difficult and may be more upsetting to the patient because of the special vulnerability of the aged to the stress of translocation.

2. Preventive Programs

Particular attention must be given in preventive programs to certain "high-risk" groups in the elderly population—those with low socioeconomic status and low levels of education; certain of those who are retired; and recently bereaved; the single, separated, and divorced, and the socially isolated; the alcoholics; the physically ill; and those who have made suicide attempts.

Preventive programs include: preretirement counseling, and efforts to involve older persons in meaningful activities as volunteers or in paid programs. For example, older people might be involved as foster grandparents or as workers in identification and information-giving programs in the community, and in residential facilities for the more handicapped and ill elderly and the isolated. Training and educational programs to enable older persons to review skills and learn new ones that may permit employment or the enjoyment of intellectual pursuits may also increase self-esteem and play preventive roles.

The Foster Grandparent Program, first developed in 1965, is a good example of a program sponsored by the Federal Government to encourage the development of meaningful roles for elderly persons by offering them opportunities to provide special care and attention to institutionalized children. The involvement of the elderly in such activities has both helped the children and improved the feelings of self-esteem of the elderly, warding off feelings of depression and loneliness, increasing their income, and giving them an opportunity to increase their relationships with other older persons. All these measures may play a role in primary prevention of emotional disturbance in the aged (U. S. Department of Health, Education, and Welfare, 1970a).

Effective screening to identify and make suitable referrals of old persons in need of help must include: complete medical evaluation, including psychiatric evaluation; evaluation of socioeconomic resources; and legal evaluation, including determination of the need for conservatorship. Such screening can take place in the community, as casefinding prior to treatment

in a hospital or elsewhere; it can take place at the time of hospitalization, and it can take place subsequent to—even years after—hospitalization or placement in some other institutional setting. The primary aim of screening is placement of the patient where he will receive the best available treatment and services in circumstances most appropriate to his condition—physical, mental, social, and economic (Rypins and Clark, 1968). The institution and the patient should have a “good fit.”

Prevention also means the general education of the public—including students in schools, colleges, and professional schools—about human development from infancy and childhood through the young adult and middle years, and about the aging process and reactions to death and dying. Preretirement counseling is an important aspect of education as a preventive measure.

3. Therapeutic Programs

Everything that is known about the treatment of mental illness in general is applicable to the aged. Therapeutic nihilism is not justified. The aged can benefit from all types of psychiatric therapy—although the goals may have to be limited for some—and their mental health can be maintained and improved by prompt and appropriate medical treatment of the many illnesses to which they are vulnerable. Treatment is available for many physical illnesses and organic and functional mental disorders that have in the past often been left untreated in the elderly because they were regarded as “just the result of old age.” The goals of treatment are: decreased suffering; improved behavior, thus decreasing interpersonal friction between the old person and those around him; increased capacity for social interaction; and encouragement of vocational and avocational activities commensurate with the old person’s capacities (Goldfarb, 1967). Types of treatment include: psychotherapy, both individual and group; somatic therapies, including drugs and electroconvulsive therapy; activity therapy; milieu therapy; social groups; reality orientation; and supportive therapy (Donahue, *et al.*, 1960; Folsom, 1968; Gottesman, 1967).

A variety of services and facilities is needed offering graded levels of care (progressive patient care). Services provided and patients’ access to them must be coordinated. Advocacy service is required (Gaitz, 1970), that is, a person must be available to represent the patient and give him any needed assistance to assure that he receives the services and treatment that are recommended, whether he is in a residential facility or living in the community. It is often necessary to lead uncertain, sometimes mildly confused or depressed elderly persons through the obstacle course of bureaucratic mazes of institutional facilities or government offices; to find an appropriate dwelling place when forced to move; and to obtain appropriate homemaker, visiting nurse, and medical care, and legal-financial assistance, when indicated. Such advocacy assistance may prevent environmental and personal crises that could precipitate an acute depression or confusional state.

The mental health field has moved rapidly from emphasis on hospital care to community care. This change has shifted emphasis from long-term treatment of the patient to brief hospitalization, referral to programs as alternatives to hospitalization, and continuity of social rehabilitative efforts in the community. Community mental health centers are in the vanguard of such efforts. To be truly functional, they must provide high quality services to persons of all ages, they must be easily available, accessible, and comprehensive in approach. Mental health personnel must be available at all hours and for emergencies and must work closely with the police, courts, and social and welfare agencies, as well as with medical facilities of all kinds, including general and mental hospitals, nursing homes, and other residential facilities. The need

to provide more choices for aged patients and their families makes necessary a greater emphasis on outpatient and community care. To encourage the development of such supportive services, community mental health centers should be allowed greater financial remuneration for outpatient and home care under Medicare.

Increasingly, special programs are being developed for the care and treatment of alcoholics. For the most part, however, emphasis is given to patients of younger ages. Even though alcoholism is not as common among aged as among younger persons, there are many alcoholic problems among those aged persons who are referred for hospital care at times of crisis. To meet the problems of alcoholism in the aged requires a coordinated effort on the part of internists, psychiatrists, social workers, and rehabilitation workers. Since physical illness often is present in these patients, comprehensive and continuing medical and rehabilitative care is a necessary part of an adequate program. Whether such programs are under the auspices of an overall health service or a specific division of mental health, in special programs for alcoholics of all ages or in geriatric centers, is not so important as that the therapeutic philosophy of the program be comprehensive and therapeutic rather than custodial. Whatever program is developed must take into consideration that many aged alcoholics are admitted to city and county jails for varying periods, where no active therapeutic program exists and little or nothing is done in the way of rehabilitation.

"Suicide prevention" centers, many of them staffed by a few full-time professionals and many volunteers, provide services throughout the country to potentially suicidal persons. A few such centers are located in community mental health centers; many are operated with privately gathered funds rather than by public funding. Such centers might be incorporated into community mental health center activities, and workers in the programs should be well acquainted with the resources of professional consultation and local community geriatric programs to which possibly suicidal older persons can be referred when indicated. On the other hand, a private agency might provide flexibility and the ability to initiate and implement innovative programs more quickly and easily than could a public agency.

4. Priorities

The importance of life and living for everyone is part of our ethic and morality, and the health needs of the entire population must be considered and met to the best of our abilities. But even though one cannot place a higher priority on the needs of any specific group, such groups may represent special problems and long-term deprivations that we wish to exert a special effort to remedy. Certainly, the mental health problems of the aged population fall into this category.

The resources of doctors (including physicians trained largely at public expense) and hospitals are today to a large extent public or community resources, and

their allocation and conditions of use are thus a public concern. The escalation from individual need to community crisis to public funding to public decision-making is the choreography of social action in a democratic society (U. S. Department of Health, Education, and Welfare, 1970b, p. 5).

In the long run, it is the public, the consumers of health services, who will decide on the major priorities.

In a time of so-called crisis in health care, the tendency is to deal with immediate crisis situations and operational problems related to them, and to give extra emphasis to meeting

these situations with the limited funds available. This action is often taken at the expense of research and of training programs. To adopt such an approach, especially as it concerns services for the aged, would mean that any future change in operational programs that requires the use of increased numbers or different kinds of health care personnel or requires new knowledge (biologic, psychosocial, or evaluative) would suffer.

Research is particularly likely to suffer from such a curtailment in times of shortage of funds. Presently trained research personnel might be forced to leave present occupations, and it would be some years before they could be drawn back, if, indeed, they could ever be drawn back. It would take years, then, to retool to the present state of research in the field of geriatric mental health, inadequate in extent as it already is.

Curtailment of research in such a crisis situation is likely to be done at the expense first of basic research rather than of operational and evaluative studies. This, too, is short-sighted, since it is from basic research that real advances in knowledge will come. Basic research personnel will move into other fields and there is little likelihood that they will ever return. Behavioral science research includes studies in epidemiology, together with studies that attempt to correlate the physical and mental health, economic, psychologic, psychophysiologic, and social factors concerning the aged and their adjustment. Basic science studies in the biology of aging, from the biochemical and molecular level through genetics and the study of organ systems and general organismic functioning, are essential to progress in the field.

Difficult as the problems raised by lack of funds may be, a serious effort must be made to provide a well-balanced program of services, training, and research, for these are all essential and interdependent elements of an adequate program. When funds are limited, every effort should be made to keep training and research at least at present levels until adequate sources of funding can be found for necessary expansion. Effort should be directed at finding ways to make our present system of delivery of services more efficient and economical, always remembering that good quality care requires adequate financial support.

The question of priorities also comes up in relation to the provision of various kinds of services—preventive, supportive, protective, therapeutic, rehabilitative—under the limitations imposed by available funding. Emphasis on preventive and supportive care may have long-range effects in decreasing the amount of expensive institutional care that must be provided. But when crisis situations arise, making 24-hour care necessary, the expansion of institutional programs is forced, to the neglect of prevention. Increasing evidence indicates that a significant segment of the aged population is concentrated in geriatric ghettos, in substandard housing, in broken-down rooming houses and hotels, often described as firetraps. Many are lonely, apathetic, depressed, isolated, poverty stricken, and entirely dependent for funds on their monthly Social Security checks. A large proportion of their limited funds goes for rent, leaving little for adequate nutrition, transportation, or recreational activities. Even when ill, they do not seek medical care and many cannot afford to carry Part B of Medicare insurance. It is from this group that many patients admitted to mental hospitals have come.

The close correlation between physical health status and psychiatric impairment in the elderly means that adequate programs directed at treatment of chronic and acute physical conditions might well prevent the development of various types of mental illness in these old persons, and slow the deteriorative process by the prevention of acute illness and the consequent forestalling of the acute confusional states so often seen in the elderly.

Adequate medical care would help the large numbers of aged who become blind, particularly those with glaucoma, cataracts, and diabetic retinal complications. Adequate attention to visual impairment and hearing defects could decrease the isolation imposed by such sensory impairment. Involvement of long-isolated persons in social activity programs might

help reduce the frequency of depression, suicide, apathy, and alcoholism. Appropriate social and nutritional programs might lead to increased interpersonal social contacts and prevent the lowered tolerance to physical illness inherent in a state of malnutrition. Where the elderly live in minority group ghettos, indigenous workers can be encouraged to let the aged and their families know about available programs—health, social, and informational—and see to it that they are referred to appropriate services for help.

Such preventive programs have been and are grossly inadequate and would seem to merit a high priority, in spite of limited financial resources. Screening programs for the identification of those with handicaps, with special attention to such high-risk groups as the recently widowed, the suicide-prone, the isolated, and those with serious physical illnesses, are also essential in a well-balanced program of services. Once handicaps have been identified, if we are to keep the aged mentally ill in the community whenever possible, appropriate supportive and protective services become necessary.

The priority requirements for therapeutic services, including both the private and the public sectors, are more widely recognized. The trend toward decreased use of hospitals for the treatment of the aged mentally ill makes it even more imperative that close attention be given to the alternative facilities and services provided, and these, because they are more recently developed, are the locus of many problems that will require large expenditures of money and manpower to solve.

The needs are great in all fields of geriatric mental health—prevention, treatment, training, education, and research—and progress is needed on all fronts. Priorities are difficult to establish, and in the final analysis it will be the public that supports and uses services that will determine the priorities.

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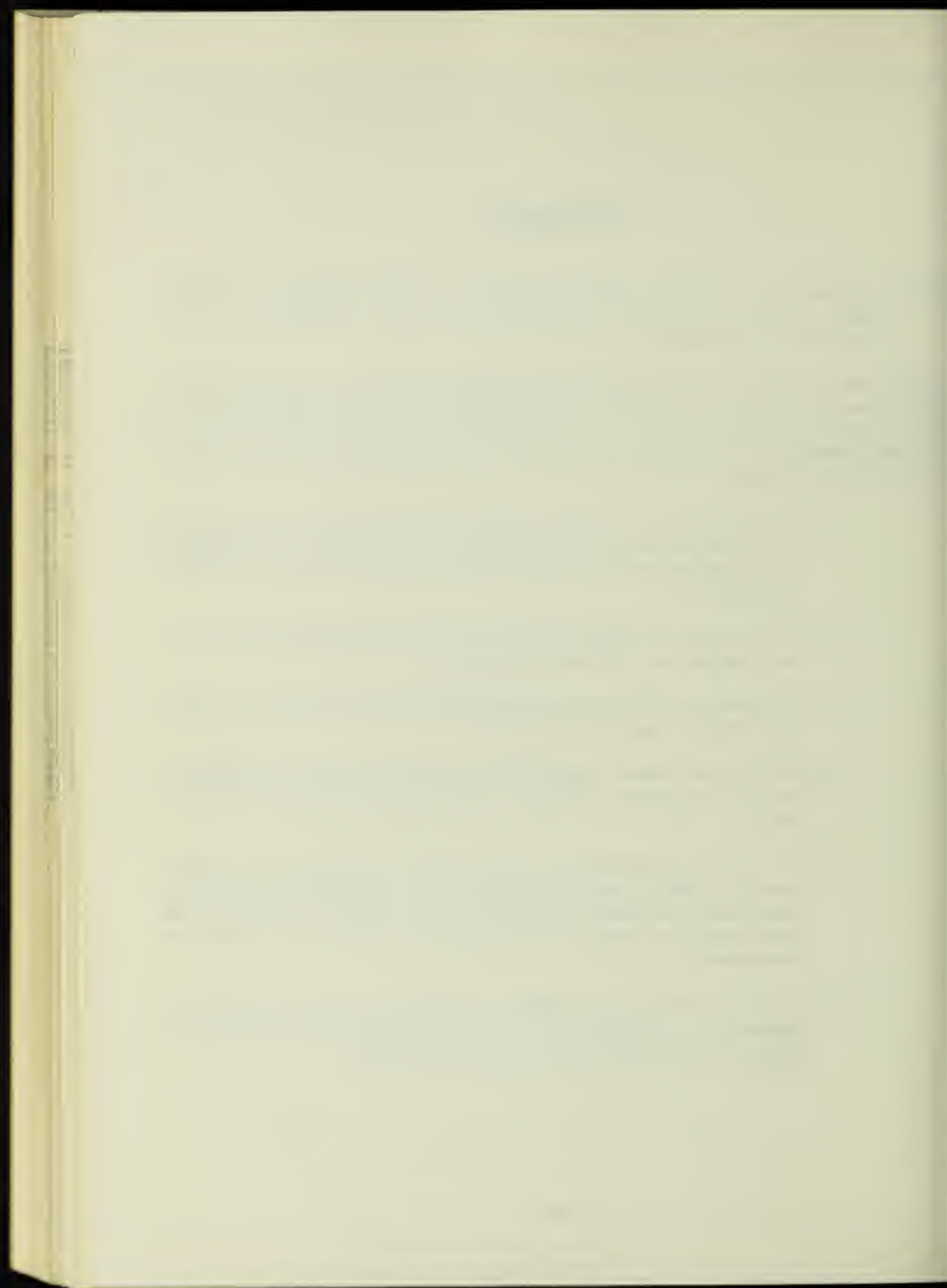
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APPENDIX

From: U.S. Department of Health, Education, and Welfare. 1961. The Nation and Its Older People. Report of the White House Conference on Aging. Washington, D.C.: U.S. Government Printing Office.

Mental health is adaptability to internal and external change, recognition of self limitations and potential, and the maintenance of a variety of sources of satisfaction. Any condition that causes pathological changes in these areas can create mental illness in the individual regardless of age. To provide adequately for the mental health needs of older people consideration must be given to certain positive concepts.

- (1) The development of a public enlightenment program which recognizes that public attitudes toward mental health can and must be changed. This process of enlightenment should begin with the child in the family and continue throughout life.
- (2) That the mentally ill aged should receive service in the community from the same agencies and clinics serving other groups.
- (3) The aged should receive mental hospital service only when they are mentally ill and there are psychiatric indications.
- (4) Mental health services, inpatient and outpatient, should be organized to allow free movement of patients between services depending on treatment needs.
- (5) The community should provide a proper psychiatric evaluation of any patient prior to initiating commitment proceedings. If commitment is indicated, plans should be started immediately toward return of the patient to the community. The procedure of commitment should not require a finding of incompetency.
- (6) Any plans which provide health care or assistance should not exclude the mentally ill. A percentage of all Federal hospital construction funds should be earmarked by the States for mental health facilities.



PART THREE: ISSUES

Because physical and mental health are so interdependent, it is considered unwise and unnecessary to develop separate policies for each. Therefore, a single set of Issues which includes both components of health are presented here.

It is assumed that basic to the development and implementation of policies is the active participation of older people. As consumers of health services, the elderly have the right and obligation (1) to take part in the formulation of the plans for services and the financing of them and (2) to work closely with the providers of the services. Policies relating to a system of health services are established largely at the national and State levels, while operation of these policies is carried out at the local level; it is therefore necessary that older people participate at all three levels. The 1971 White House Conference on Aging provides older people with this kind of opportunity.

The scope of the problem and the urgency of the need for a sweeping attack on many fronts to bring about better health care and preventive services has been most succinctly stated by John W. Gardner (1970) as follows:

Arrangements for delivering medical care are increasingly costly, badly distributed, and unsatisfactory . . . Among the problems are obsolete and decaying facilities, shortages of health manpower, and the gross inefficiency of the existing health machinery—inefficient methods of practice, wasteful use of highly skilled professionals, lack of effective control on expenditures, and duplication of effort. The problems are made worse by lack of a unified Federal policy and direction in the multiplicity of government supported programs.

We can improve health care for the poor by redesigning the present methods of delivering health services. We can improve the manpower supply through training programs to make available more of the traditional as well as new types of health workers. We can stimulate prepaid group practice, which has been demonstrated to have a beneficial influence on productivity of health services as well as on cost control. But none of these objectives will be achieved without major alterations in professional and institutional attitudes and practices . . . In our concern for the delivery of health services, we must not diminish the support of biomedical research. In the long run, research may do as much as all our more 'practical' efforts to improve . . . health . . .

The issues which are presented here reflect the concerns expressed by Gardner and deal with the following questions:

- (1) Should there be separate health services for the elderly?

- (2) Is there need for a total system of personal health services in this country?
- (3) Are changes in Medicaid and Medicare indicated?
- (4) Where should the responsibility be placed for the planning, funding, and operation of health services?
- (5) Is a program of public education needed about specific health changes and diseases associated with aging?
- (6) Is there a need for geriatric specialties in medicine and related fields?
- (7) What are the priorities for allocation of available resources for service, training, and research in the health field?

Issue 1.

Should health services for the aged be singled out for special consideration and action. Or should they remain inseparate from services for all adults as at present?

A number of arguments are offered for singling out the aged for special services. Certain physical and mental changes appear almost exclusively in older people, and thus this age group requires somewhat different treatment programs, facilities, and rehabilitative services than do younger age groups. The mentally ill aged in particular tend to be overlooked or even neglected unless the aged as a group are planned for separately.

Another factor recommending the separateness of health services for the elderly is that their chronic conditions require a greater amount of care and more complex care, and, therefore, they need more services than any other age group. Also, among older people there seems to be a unique relationship between illness and socioeconomic factors which calls for special understanding and skill in social planning on the part of those who serve them. A strong point is made of the fact that many of the existing public and voluntary programs are organized specifically to serve the aged, and stronger emphasis on age-integrated services might prove disruptive.

Those who argue for integrated services offer a variety of reasons. The treatment for many of the physical and mental illnesses and disabilities is the same for all age groups. Separate services for the aged would require more health manpower. Many older people do not like and might not use services and facilities that set them apart from other age groups. The cost of a special comprehensive health care program just for the aged would place too heavy a financial strain on Medicare, and, therefore, some resources other than the Social Security tax would have to be developed to finance it.

Issue 2.

Should a system of coordinated personal health service for both the short- and long-term care of the physically and mentally ill aged be developed, legislated, and financed? Or, should the uncoordinated, generally fragmented health services as now provided be continued?

The essential features of a *system* of coordinated personal health services must meet the needs of all older people. The system must cover both physical and mental health because not only are the two interdependent, they are inseparable. The system must meet the needs of: (1) those who are physically and mentally well and therefore need only preventive service; (2) those who are acutely ill or mentally disturbed and need intensive treatment and (3) those who develop long-term chronic illnesses and mental impairment calling for a combination of treatment and meaningful programs of living either within or outside an institution.

The components of a system of total health services for the elderly are the same as those for other age groups—namely: assessment, prevention, treatment, maintenance, and rehabilitation for both short- and long-term care. The advantages of a system of comprehensive health care are recognized—but can such a system be delivered?

Before the issue can be resolved, it is necessary to consider and evaluate the difficulties:

- (1) A system of coordinated health care, as contrasted to existing health care delivery procedures, would call for substantial changes in the utilization of health manpower and facilities as well as changes in current mechanisms for health care financing. Anything less would result in no improvement over that which presently exists.
- (2) A first requisite to comprehensive health care is an assessment of an individual's present health. The general public, the members of the health professions, and the elderly themselves have been indifferent and even resistant to attending to health problems before symptoms appear. It would require tremendous effort to change the behavior patterns of the professionals, as well as the elderly.
- (3) To include mental health services as part of the health care system would require that this aspect of the care of the elderly have attention equal to that given physical health problems—a situation that does not now exist. Yet it is more efficient to develop a single system as opposed to a dual system because the mentally ill are prone to suffer also from physical ailments. The inclusion of mental health services in a comprehensive health care system would thus facilitate the most efficient use of health manpower and facilities and insure that all aspects of the health of the elderly are given attention.
- (4) Provision of genuinely comprehensive care (even to those who are ill) would require new patterns of organization and new methods of working. Our past and present efforts to meet the health needs of the aged have concentrated upon developing isolated types of resources and services, usually with separate services and facilities for the physically ill and for the mentally ill. A comprehensive care system calls for coordination and teamwork. It means melding many different professional and nonprofessional services into a smooth operation that serves the patients' multiple and complex needs. It means flexibility about the settings where services are given: the patient's home, the hospital, the nursing home, the outpatient clinic, the neighborhood health center, etc. It means finding the money and manpower to operate such a program.

- (5) Considering that old people are thought generally to resist change, would they themselves subscribe to such basic changes in our present patterns even though it meant they could enjoy more years of better health?

The difficulties seem immense, and as a consequence there are those who subscribe to a continuation of the present practice of fragmented and uncoordinated care. Some feel that the system should not include mental health because the mentally ill require specialized facilities and treatment programs different from those needed for physical care. They also point out that psychiatric personnel need somewhat specialized training to equip them for administrative and operational legal procedures related to protective care of the mentally impaired elderly. It is believed, too, that the currently neglected mental health needs of the elderly would have less visibility if submerged in a broader health program.

It seems clear that the time has come when a national policy which encompasses all aspects of the health needs of the elderly is an imperative. One frightening prospect—if there is no change—is that the current pace of growth of the aged population coupled with its present use of health services might propel us into a catastrophe. If we continue our present course the steadily increasing demand upon manpower, facilities, and funds is likely to become so prodigious that instead of improvement there will be lower quality of care for old and young alike.

Issue 3.

Should Medicare and Medicaid legislation and financing be extended to include payment for other services not now provided in the continuum of health care? Or, should the complete range of health care services for the aged be financed through some other mechanism such as a national health insurance program?

Medicare was never intended to cover all health expenses of the elderly, but time has proven it to be even more limited in some respects than was originally anticipated. There are important and costly health needs of many older people—such as out-of-hospital drugs, preventive health services, and long-term institutional care—which are not touched by Medicare at all. The mental health services so vitally important to the elderly population have been only minimally provided for, and much needed services have actually been excluded in the legislation.

The 1970 report of the President's Task Force on The Aging contains one recommendation which would make sweeping modifications of Medicare—including: (1) coverage for extended care and home care without prior hospital admission; (2) expanded coverage for home care; (3) coverage of out-of-hospital drugs at the earliest date administratively feasible; (4) removal of the one-hundred-day-time-limit on skilled nursing home care; and (5) coverage for early diagnostic and other preventive services (Presidential Task Force on The Aging, 1970). Another recommendation of the Task Force is that the restrictions in Medicare coverage for out-patient psychiatric care be removed so that Medicare would pay for the same benefits for out-patient psychiatric treatment as it does for all other medical care. In addition, the Task Force calls for removal of the 190 day life-time limitation for in-patient treatment in a psychiatric hospital.

Other than the serious lack of Medicare coverage in institutional care (except that in the hospital and extended care facility), the Task Force identified as among the most pressing problems the health care costs for which the older person is subject but not compensated.

Some persons have argued that implementation of the health recommendations of the President's Task Force on The Aging—given the present "system" of medical care—would involve additional costs to both the Medicare Trust Fund and the older person that would be prohibitive. However, this does not lessen the fact that under the present circumstances the economic inadequacies of Medicare and Medicaid are such as either to place burdensome health care costs upon many older persons or to deny them care because of their inability to pay.

Similarly, many serious shortcomings are found in the Federal-State cost-sharing Medicaid program. Wide differences exist among many States as to those who are eligible to receive assistance. Moreover, there is great variability among States in the benefits paid. This is a very difficult program to administer and costs are high, especially in relation to the quality of care and services provided. *There appears to be no possible chance that Medicaid will fill the gaps of Medicare.*

Therefore, unless radical changes are made in Title XVIII (Medicare) and Title XIX (Medicaid) of the Social Security Act and unless substantial additional amounts of money are made available for implementation, it would not be realistic to expect additional health services from these sources. If all possibility of these additional funds is eliminated, alternative means of financing must be devised.

Some of those who oppose the expansion of the Medicare and Medicaid programs have suggested that one alternative might be the development of a prepaid mechanism which would be integrated with group practice. An advantage of this, they maintain, would be to place responsibility for quality of care on the shoulders of the providers of services. Because of the element of prepayment, the providers would have a strong incentive to stress preventive and other measures that would reduce costly illness.

Another alternative suggested is the development of a centrally controlled "national health insurance program" which would serve the older population along with all other age groups. This alternative poses many serious problems, including the beliefs and feelings of a great many people both in support of and contrary to such a program.

Somewhere in all of the suggested alternatives there must be a compromise which will satisfy all concerned with the objective of better health care for the elderly. Three factors which raise fundamental questions about any alternative are its projected costs, controls for efficiency, and relative effectiveness. For example, one might speculate that the present Medicare mechanism, bolstered by additional funds from general tax revenues or some special source, might be the more economical plan. The crucial question, however, is: Even though this alternative may be less expensive, would its effectiveness be sufficiently adequate to make it the choice?

Issue 4.

Should responsibility for the entire spectrum of health services (physical and mental) for the aged be vested in the public sector of society? Or, should it be placed in the private sector? Or, in some intermix of the two? At what level should the responsibility be fixed—National, State, or local?

At present, older people receive health services from government agencies, voluntary organizations, and private practitioners. All of these providers have different policies and procedures. In addition, provision of health services involves various combinations of representatives from a broad range of organizations at the local, State, and National level in planning,

funding, setting standards, providing, and evaluating services. To an increasing extent, the consumer is actively participating in those activities which affect the quantity and quality of health services he will receive.

Many people believe that one reason why services to the elderly are so often inadequate and inferior is because responsibility is so divided. The question then is whether some other assignment of responsibility would be preferable.

In the *public sector*, the Federal Government has assumed an all-important special financial role with the passage of the Medicare and Medicaid amendments. Also, because of this legislation, the Federal Government has become responsible for planning, setting standards, and evaluating.

Prior to Medicare, the Federal Government was also involved in providing health services, although these services were not specifically for the aged. Federally provided health services were available for veterans, military personnel, Indians, migratory workers, and for certain Federal employees. Because of Medicaid and other cost-sharing special programs (such as departments of mental hygiene and rehabilitation) State Governments are also committed to funding, planning, setting of standards, and evaluating. In addition, States provide the principal health services for tuberculosis and mental illness. Local governments, particularly those of large counties and municipalities, provide health services through their departments of health and hospitals; local government agencies, therefore, are also deeply involved in planning, standard setting, and evaluating.

Increased State and local participation in planning for the utilization of Federal funds for health services was made possible through the "Partnership for Health Program" enacted in 1966 and administered by the Public Health Service. This program introduced the concept of comprehensive health planning as a mechanism through which the planning activities of all the health and related elements are linked together.

The *private sector* is composed mostly of individuals, professional and lay groups (business, labor and religious), societies and associations, charitable foundations, and private colleges and universities. It is in this sector that most of the health services are provided, being provided by professionals serving either as individuals or in groups or associations. National societies and health associations are deeply concerned with health problems and in planning and articulating policy. Many professional societies at the State and large county and city levels also engage in policy setting. Foundations, as well as some societies and associations, are concerned with funding for health services—some of them to a very large degree.

Under existing circumstances, therefore, there is a thorough admixture of actions throughout the spectrum of health services for the aged which is carried on by elements in both the public and private sectors of society and at the National, State, and local levels. But this intermix, as now constituted, has not produced a result which satisfies a large component of society. Health services for the aged leave much to be desired.

One alternative to the intermix might be to have the entire responsibility for health services for the aged reside in the private sector. In the past this was where the major responsibility was vested. However, with the increasing complexity of funding mechanisms, the provision of services, and even of the society itself—government has moved into the picture at all levels. This has occurred as a result of multiple factors: the aged have become a numerically more important segment of the country's population; the delivery of health services has become increasingly sophisticated; and greater awareness of the problem has led to increased social concern about the individual. Unless the private sector can produce the leadership and an organizational plan with funding to satisfy these and many other problems, it would be

difficult to imagine assumption of responsibility by the private sector for the complete spectrum of health services for the aged.

Another alternative to the present intermix might be for full responsibility to reside with the public sector. This amounts to a "national health program for the aged" and responsibility and direction for such would have to reside in the Federal Government. A new organization would almost certainly need to be established to assume the responsibility. There is, however, reluctance on the part of many to see the central government involved in so intimate a fashion in the personal lives of individuals. There are, of course, powerful arguments on both sides of the issue as well as questions that are raised with regard to the speed with which such responsibility could be delegated, assumed, and carried out.

Those with a special interest in mental health point out that whereas in the past the State with assistance from the Federal Government had the major responsibility for the mentally ill, the general trend today is toward more local autonomy. However, the cost of prevention and treatment of mental illness is so great that State and Federal support are provided now, and there is little likelihood that without the continuance of such aid present programs could be maintained, let alone improved. Also, if standards were set locally, the quality of care in different communities might vary greatly.

On the other hand, if more care were available locally, patients would not need to lose their community ties—as they often do when they are placed in State mental institutions. Also, standards established at State or Federal levels might deter communities from establishing programs that would be helpful, even though they did not meet the standards.

Advocates of local autonomy also note that even in sparsely settled areas it might be possible to improve care to local residents by having several communities or counties develop a cooperative program. Such a program could provide transportation to patients to a central facility and could employ travelling teams of mental health specialists to visit each community at regular intervals.

Perhaps this issue cannot be resolved on an either-or basis. Thus, consideration needs to be given to the degree and nature of responsibilities that should be assigned to local, State, and Federal levels in order to assure that each patient gets the service he needs through a coordinated, comprehensive program.

Issue 5.

Should a continuing program of public education about the specific physical and mental changes associated with the process of aging and with diseases in the aged be provided on a national scale? Or, should such mass education be avoided because it is wasteful, ineffective, and possibly hazardous?

Undoubtedly, older people would be healthier if they knew about and *used* all the available knowledge about protecting and improving their health. A comprehensive, well coordinated program of health education would help them, not only to learn about, but to use information about their own health problems. At present, although some health materials appear in the mass media, there is no intensive large scale educational effort that includes the use of these and other motivational techniques. Older people would probably gain more than any other age group if they applied recent knowledge. This is because so much of new knowledge pertains to the chronic conditions that afflict them.

On the other hand, the "ignorance is bliss" view has some real validity because there is a strong possibility that if they knew more about health problems they have or thought they might have, people might become more fearful and anxious. This might even cause some to resist seeking treatment.

Would the gains outweigh the hazards? Can programs be designed to alert but not alarm and generate serious anxieties?

Issue 6.

Should effort be placed on including curricula or course content on physical and mental health problems of the elderly in undergraduate or graduate professional education and inservice training health workers? Or, should emphasis be placed on the development of geriatric and geropsychiatric specialists?

Shortage of health manpower constitutes one of the most pressing problems in the delivery of comprehensive health care. The most seriously affected are the economically and socially deprived. Thus it is that the elderly population, with its poor economic position and its many physical and mental health and social problems, is especially disadvantaged.

The basic question is whether or not older people would have their physical and mental health needs better met if specialization in geriatrics and geropsychiatry and ancillary professions were to become recognized medical specialties. Or, whether the elderly will be just as well served if more emphasis is placed on providing some training about the health problems and the psychological needs of the elderly for all persons, professional and nonprofessional, who serve their needs.

In support of the issue on broad professional education and nonprofessional training relating to the physical and mental health problems of older people, there is reasonable expectation that by adding appropriate knowledge to the training programs of all health personnel, older people would probably get better health service than they do today. Such additions to knowledge could take place during the course of undergraduate professional education, during the course of graduate professional training, and, perhaps most importantly, as an integral part of continuing education of the professional practicing in the community. The nonprofessional community workers—such as social service aides and assistants in medicine, psychiatry, dentistry, nursing, and other fields—are often even closer to the health of the elderly than are professionals. They are, therefore, in as much need as the professionals of training about aging.

Another point to be considered is that older people often express a wish to consult a physician or psychiatrist who is a specialist in the problems of elderly persons. They feel that their memory loss, their depressions and fears, and their rather profound physical changes require the professional attention of a specialist. In the United States, very few physicians specialize in the care of the elderly, and there is no medical specialty in geriatrics. In fact, professional educators concerned with undergraduate and graduate professional training (as well as many practitioners) are generally opposed to geriatric specialization. They even resist the addition of course content dealing with aging and the aged in any specialized sense. This has been particularly true of medicine, dentistry, and nursing. It suffices to say, however, that any educational policy that rejects programs of broad educational value about health needs of the elderly is a serious impediment to creating any real body of thought and research directed to the older person. There are those, therefore, who strongly believe in the desirability of

geriatric specialization and that this is the only mechanism through which professional people will become properly knowledgeable about the aged.

Two questions must be answered: Should the medical and allied professions give attention to providing for specialization in geriatric problems, especially if the elderly feel that such professionals can better provide preventive and treatment services? Would research be advanced more rapidly and effectively if there was greater specialization and visibility given to geriatrics as a field of study?

Issue 7.

In view of the critical need to provide much more direct services to the physically and mentally ill elderly, should all available funds be put into these services? Or, will the aged be better served in the long run if the available funds are apportioned among services, research, and training of health manpower?

The needs of the ill elderly are so desperate right now that in the opinion of some, money allocated for the health of the elderly should be increased, and *all* such funds should be earmarked for direct services, with support for research and training minimized or postponed entirely. Others warn of dangers inherent in such an extreme approach. They point out that without strong and expanding training programs, the manpower shortage, which is already critical, will grow worse. Moreover, they caution, if we allow our research programs to retrench rather than expand, needed knowledge will not be gained. Even more serious, research personnel will be drawn into other programs, and it might take years to build up aging research programs again to even their present inadequate levels.

Indeed, many authorities are of the strong opinion that the large gaps in existent knowledge about the health of the aging and aged, coupled with the importance of filling these gaps, underscores the need for an increase in the level of research activity.

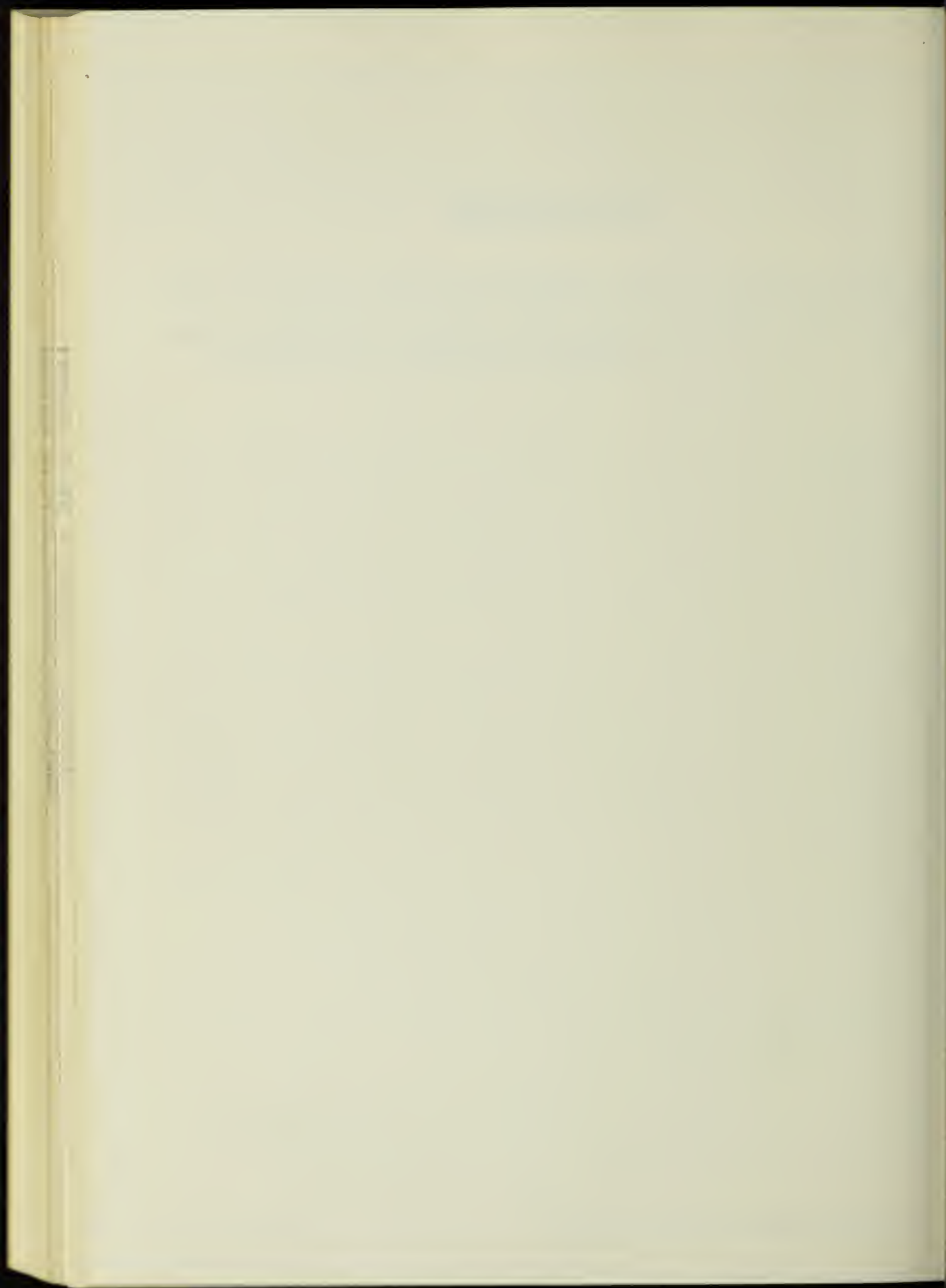
Many of the most fundamental aspects of biomedical, psychiatric, psychological, and sociological aging are unknown or are poorly understood. Upon solution of these aspects rests essential approaches to the aged person. Obviously needed are more scientists to carry out basic studies and more facilities to enable them to carry out their mission. These steps must and should be largely a problem for the scientific community, but the members of that community are helpless without adequate and vigorous support from governmental and private sources and the public at large.

Even if support for services, training, and research could be properly balanced, questions would arise about priorities within these fields. For example, would the long-range economies of preventive services win out over the immediate satisfaction of providing better treatment to those who are now ill? Are we more interested in supporting the basic research which would provide knowledge on how to extend the life span so that people can be active until they are well into their hundreds than in supporting research on ways to improve services to people who can expect to die at about the age of 80? Is our need to train specialists greater or less than our need to train generalists and nonprofessionals?

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FOREWORD

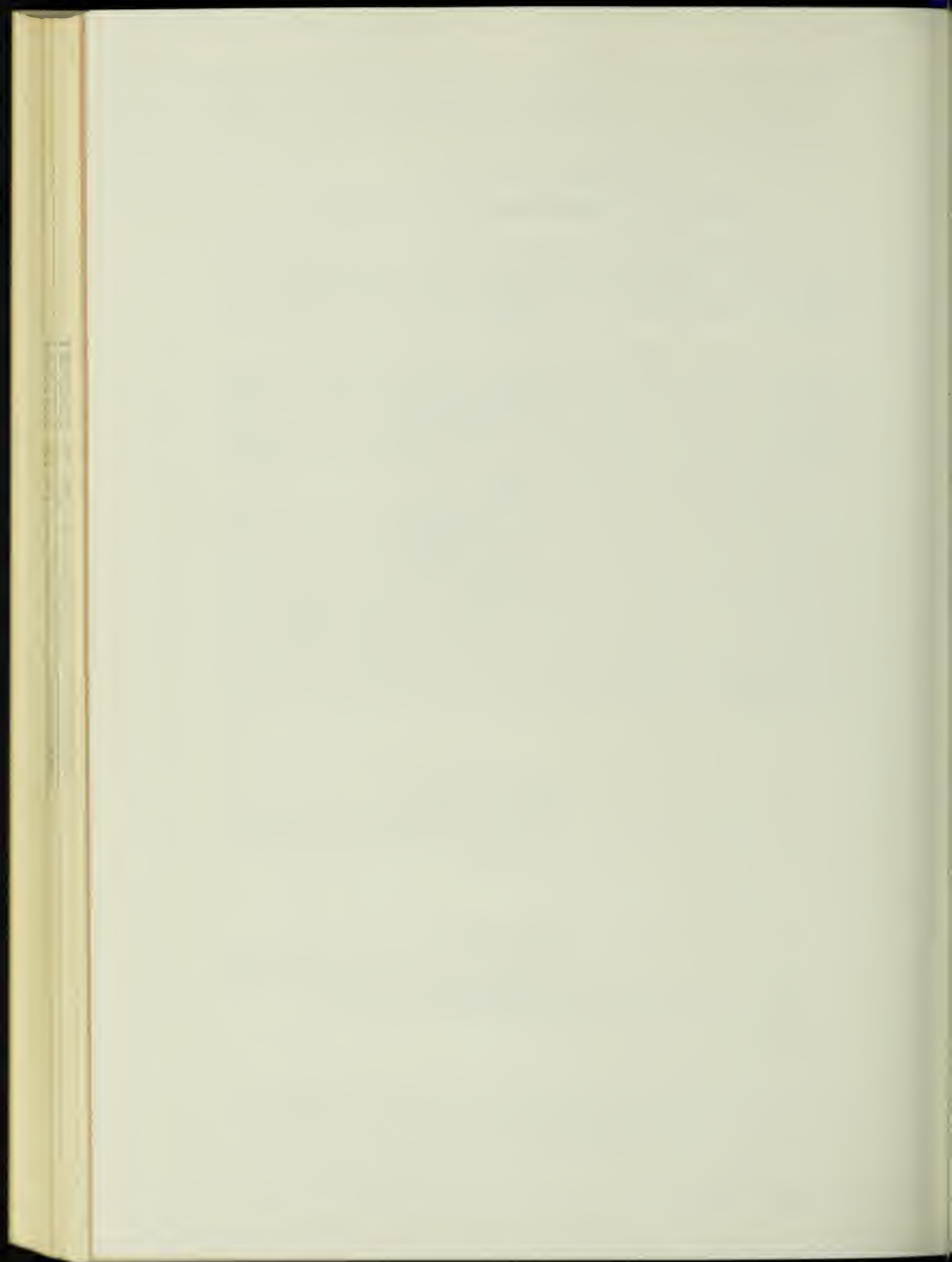
This paper on Planning provides information for the use of leaders concerned with the development of proposals and recommendations for national policy consideration and of delegates to the national White House Conference on Aging to be held in Washington, D.C., in November-December 1971.

The first four sections of the paper discuss: the need for planning in aging as a means to improve the well-being of the elderly; goals proposed by previous conferences and groups; information on knowledge now available relevant to planning in aging; and identifiable gaps in this area. These sections of the paper were prepared by Robert H. Binstock, Ph.D., Associate Professor of Politics and Social Welfare, Brandeis University, with guidance from the Technical Committee on Planning.

The fifth section of the paper discusses several major issues relevant to an overall plan to meet the needs of the elderly. The issues were formulated by the Technical Committee on Planning for consideration by participants at all levels and by concerned national organizations. The purpose of the issues is to focus discussion on the development of recommendations looking toward the adoption of national policies aimed at meeting the needs of the older population. The proposals and recommendations developed in Community and State White House Conferences and by national organizations will provide the grist for the use of the delegates to the national Conference in their effort to formulate a National Policy for Aging.

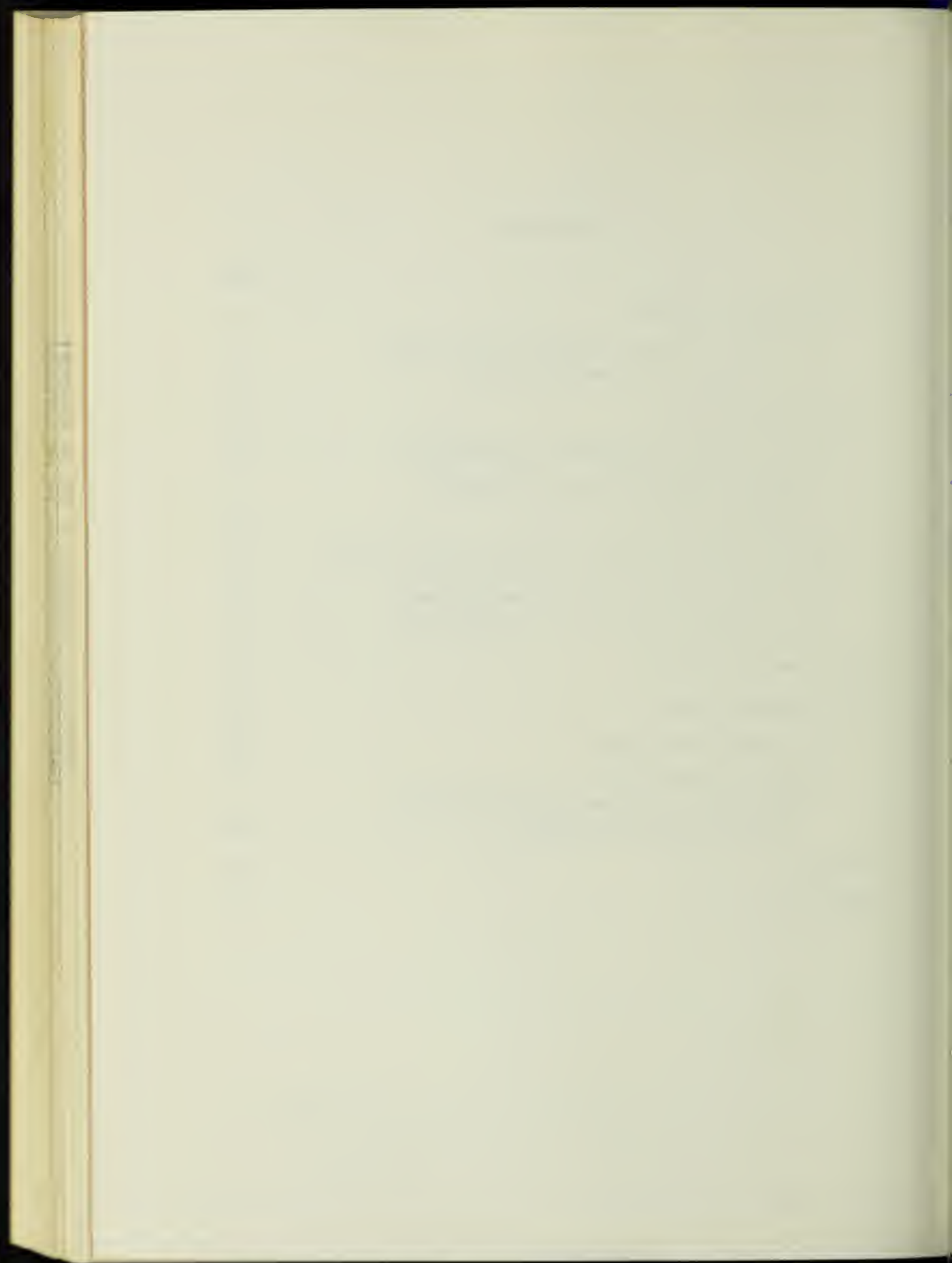
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for the 1971 White House Conference
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I. INTRODUCTION—THE NEED

The phrase "planning in aging" expresses a hope that the many public and private collective efforts that are and could be undertaken to enhance the well-being of the aging will be more fully developed, more efficiently implemented, and generally more helpful to older Americans.

This hope was expressed throughout the Report of the 1961 White House Conference on Aging. It reflected the view of Conference participants that the needs of the elderly—income, housing, physical and mental health, nutrition, education, employment and retirement opportunities, social roles and activities, spiritual well-being, transportation, and others—were not being met effectively. In addition, Conference participants expressed the view that the mechanisms established to meet those needs—the policies and programs of government and private organizations, the services and facilities they support and operate, the research projects and demonstrations they finance and conduct, and the personnel they train—are relatively inadequate and insufficient. This view is still held today by older persons, Federal and State legislators, agency administrators, and professional gerontologists throughout the nation. Planning in aging is looked to by most of them as a means for improving the performance of mechanisms that are expected to help meet the needs of aging and aged persons.

A. CONFUSION ABOUT THE MEANING OF PLANNING IN AGING

Some people talk about planning in aging as if it were a refined technology or a super-mechanism that can somehow get all other mechanisms to perform more effectively in meeting needs of older persons. But precisely what does planning in aging mean? Is it simply a phrase that expresses a laudable aspiration, or does it have concrete meanings that can be usefully applied?

Professionals in the field of aging, as in many other fields, often use the word "planning" as if it represented a relatively universal and clear set of technical and administrative phenomena. But it does not. In truth, it connotes a wide and disparate range of images and activities that are often unrelated and sometimes competing. The consequences of ambiguity about the meaning of planning in aging are practical as well as intellectual. Practitioners and scholars talk about planning as if they shared common ideas and frames of reference when, in fact, they do not. Largely because of this lack of clarity, it is very difficult to mount a sustained and effective effort at planning in aging.

In one context or another the following activities are carried out, or at least talked about, as part of planning in aging: information-gathering; liaison; technical assistance; plan-making; coordination; establishment of priorities; advocacy; regulating; problem-by-problem solving; educating the public, politicians, or professional constituencies; employing of Planning, Programming, Budgeting Systems (PPBS), Program Evaluation Review Techniques (PERT), Management By Objectives (MBO), social indicators, or some other quasitechnical procedures; developing new, expanded, or reorganized services, facilities, or programs for the aging; having aged persons express their needs; avoiding budgetary and manpower waste; designing a utopian blueprint for the aging; and public relations (getting people to think that you are doing one or more of the above).

This listing is neither complete nor definitive. Virtually every term within it could be replaced by another term (e.g., substitute "lobbying" for "advocacy"). And depending upon how one uses any given term, it could be argued that some of these activities are essentially the same. "Coordination," for example, could be the same as "liaison," "regulation," "avoidance of waste." Moreover some of these activities can be seen as procedural steps that are requisite for a more encompassing planning activity. "Establishment of priorities," for instance, is often understood to be a necessary procedure in plan-making. However, it is sometimes the case, (as with the development of "the State Plan" in aging) no conscious effort to establish priorities takes place in any part of the process.

The extent and nature of the confusion regarding planning in aging can be illustrated by the myriad intellectual and behavioral interpretations that are given to two of the most universally acknowledged planning activities—"information-getting" and "plan-making." Virtually all of the scholars and practitioners engaged in planning in aging would agree that whatever is meant by planning, information-getting must be part of it. The types of information to be sought, however, may be quite different. It may be information *about* older people—such as their number, their incomes, their housing conditions, their health. It may be information gathered *from* older persons, such as their feelings about themselves, their views about their needs, their suggestions for action. Or it can be information (frequently referred to as "program evaluation") about mechanisms that are, or might be, attempting to benefit older persons: the amount of money spent; the size and quality of organizational staff; structural and working relations among agencies; future intentions of agencies, number of clients served, measurement of program impact, simple descriptions of operations. In addition to these various *types* of information, there are a number of distinct *ways in which they can be gathered*, ranging from elementary and invalid surveys to the use of sophisticated technical tools. There is little purpose in elaborating much further. The main point is to indicate the diversity of objectives, activities, and techniques that can be found just within the simple category of information-getting.

Another widely acknowledged category of planning activities is plan-making. To some this connotes the development of a comprehensive utopian blueprint, outlining an ideal set of future conditions for older Americans with a timetable for realization. To others it means a detailed, written description of short-term organizational objectives and operational procedures. A common form of plan-making in the field of aging is the hasty preparation of a document that will enable an organization or subunit to meet an administrative or legislative requirement, so that it can receive operating funds or justify its continuing existence and value. The plans made in this fashion consist of little more than old information and rhetoric, slightly reworked into a format that meets the requirements of a parent agency or some other authoritative organ.

Information-gathering and plan-making are but two of the categorical groupings that are commonly regarded as part of planning in the field of aging. But they serve to illustrate something of the nature and extent of the confusion that prevails. The disparate though not exhaustive meanings noted above reflect different interpretations of *the activities to be undertaken* and *the technical methods for doing so*. These are critical factors in defining and carrying out any attempt at effective planning. But equally critical factors are: *who is attempting to carry out planning*; *what auspices and resources are available for carrying it out*; and *toward what targets or objectives is it being directed?*

In this light it is possible to appreciate why the only universally shared meaning of planning in aging is a hope that activities undertaken to benefit the aging could be more fully developed, more efficiently implemented, and generally more effective. Very few gerontologists share common notions regarding *who* carries out planning for the aging; *what* it consists of; *how* it is to be done; the *means available* for doing it; and, above all, the *goals* to be achieved through it.

If older Americans are to benefit from planning in aging, these issues will need to be clarified. The practical consequences stemming from intellectual confusion about the meaning of planning seriously hamper the effectiveness of efforts at planning. Congress, for example, may appropriate special funds for each State to undertake increased planning in aging, and the Federal Administration on Aging (AoA) may encourage each State to accelerate its planning in aging. But the planning funds may be distributed to quite different parties within each of the States. In some States they will go to a planning unit within the State Office of Finance and Administration (or Planning and Budgeting). In others, they may go to the planning staff of a department of health, welfare, or corrections. In still others, they will go to an officially designated State Unit on Aging (SUA), which might be a subunit of a department or agency, or an operating agency in its own right, or a quasi-administrative citizens' commission. Just where the planning funds are lodged in each State will, of course, do much to shape the opportunities

and constraints for what can be carried out through planning. Each different type of recipient will have a different interpretation of his responsibilities within the administrative and political context of his State government. Each will have his own capacity or limitations for wielding authority and power. Moreover what each does with the new planning funds (the activities he finances with them) will differ substantially. Finally regardless of the specific parties receiving funds, their authority and power, and the ways in which they use the funds, the States will vary substantially in their interpretations, if any, of the objectives to be achieved through activities in planning in aging.

It is true that any given planning objective, planning activity, and planning procedure *may* benefit the aging. And any given government or private agency *may* have responsibilities, authority, and power useful for carrying out *some* planning objectives, activities, or procedures. But under the current confused conditions, productive fits between objectives, activities, power resources, and responsibilities for planning are little more than fortuitous. Many agencies with responsibility for planning in aging are gathering information, but do nothing with it once they have it. Some have established a list of priority needs, but have no capacity to meet them. Others have attempted to provide technical assistance, but do not have the technical competence to do so. Still others have developed plans for coordinating the services of other organizations, but have no power to bring about the desired coordination.

In short, the critical elements involved in any planning effort—resources, procedures and activities, power, and responsibility—have not been sorted out into effective working patterns for achieving objectives that will benefit aging Americans. The idea of planning in aging is looked to for fuller development, more efficiency, and greater effectiveness in meeting needs of older persons. But efforts at planning in aging are relatively underdeveloped, inefficient, and ineffective. The usefulness of planning in aging will depend upon the clarification of the objectives to be achieved through it, and the means for realizing those objectives. In 1971 it is no longer sufficient to feel satisfied that certain activities that can be *called* planning in aging are being carried out. The challenge in the 1970's will be to actually realize specific objectives through specific planning activities. To meet this challenge, efforts at planning will have to be geared to far clearer understandings of what is to be achieved, who can actually achieve it, and how and when it can feasibly be done.

B. THE CHALLENGE OF "LEADERSHIP PLANNING"

Periodically and in limited, temporary contexts, the objectives of planning in aging and the means necessary for carrying them out tend to become clarified. When conferences, task forces, commissions, and study groups undertake a thorough review of our society's existing mechanisms for meeting the needs of the aging and aged, they inevitably confront a simple fact. It is that the vast majority of programs, services, and facilities affecting or potentially of value to older persons are operated by "generic" private and public organizations that have responsibilities toward human beings of all ages. Moreover it is apparent that in most generic organizations, the needs of the aging seem to have lower priority and attention than the needs of other clients and consumers. When this situation becomes clear, the objectives of planning in aging become clear. They are to make these generic organizations more sensitive to the needs of the aging, and to act more vigorously (both singly and in concert) to be of service to older persons.

Whenever these objectives of planning in aging become clarified, various labels are attached to them—"coordination," "advocacy," "education," "policy-making," and so on. They all involve a capacity to lead these generic organizations into a better performance with respect to the needs of aging and aged Americans. Throughout the remainder of this paper, this type of planning will be referred to as "leadership planning."

In its very nature, leadership planning in aging presents a difficult challenge. For it requires a capacity to get generic organizations to change their existing policies, priorities, and patterns of operation. It means getting the welfare department to provide more social services for the aging; getting the United Fund to allocate a large share of its annual proceeds to

programs for the aging; getting the local private hospital and the public health department to collaborate in developing a home health-care program for the chronically ill elderly; or getting the Model Cities agency to include the needs of aging citizens when it develops its plans. In other words, leadership planning requires the ability to exercise some form of influence or power over a wide variety of organizations.

Few private and public mechanisms established to carry out leadership planning in aging have many resources for exercising power over generic organizations. The most common are: legislatively established regulatory authority; funds that are earmarked for nonoperating leadership purposes; and prestige or status. National, State, and local mechanisms for leadership planning in aging, however, are very poor with respect to these resources. None have much regulatory authority; very few have substantial funds for nonoperating purposes; and only a handful have sufficient prestige to have much impact on generic organizations, even for relatively limited purposes.

Given this poverty of resources for wielding power, nonoperational mechanisms established for leadership planning tend to become diverted from their primary objective. They engage in activities commonly recognized as part of planning in some sense, but the activities are not shaped or directed so that they may be useful for bringing about change. Information is gathered, meetings are held, needs are identified, and plans are drawn. But there are no products or concrete results from these activities.

In the course of these frustrating activities, the leadership-planning mechanism begins to become preoccupied with the development and operation of a program of "its own." A local Committee on Aging will try to start up a new senior center. A State Unit on Aging will tend to operate a minor grant program *as if* it contained sufficient funds to develop a comprehensive statewide grant program. Planning activities continue, but they become directed towards these operational ends. Data are still gathered, meetings are held, and plans are drawn. But they are data, meetings, and plans directed toward the objectives of developing and improving one's own operation. In short, the mechanism established for leadership planning drifts into administrative (management or operational) planning.

This pattern has been very common in the field of aging in the ten years since the last White House Conference on Aging. It has not been wholly undesirable since the common drift from leadership planning to operations and administrative planning has led to the development of some new nongeneric programs and services for the aging. However, since the major existing organizations in our society are generic and still remain relatively unresponsive to the needs of older Americans, the need for effective leadership planning in aging is greater than ever.

The White House Conference on Aging of 1961, as indicated in Section II, Long-Range Goals, effectively identified the need for leadership planning in aging within various sectors of American society. If the 1971 White House Conference simply repeats this process of identification, it is unlikely that planning for the aging will accomplish much more in the 1970's than it did in the 1960's.

The challenge to this upcoming Conference is to deal squarely with the issue of power. How can the requisite power be developed to make the mechanisms for leadership planning in aging effective? Unless this question is dealt with, planning in aging will remain a laudable aspiration rather than become a mechanism for meeting the needs of older Americans.

II. LONG-RANGE GOALS

Some of the most authoritative statements of *national* goals for planning in aging can be found in the report of the White House Conference on Aging of 1961, in Presidential Executive Orders, in Congressional legislation and testimony, and in the reports of Presidential task forces. To be sure, in the past several decades, planning has been discussed in numerous documents concerned with the needs of older Americans—scholarly papers, conference transcripts, and the reports of dozens of local and State study groups, councils, and commissions. But for *national* goals, one must look to statements set forth by bodies that can, in one sense or another, be regarded as representative of the nation as a whole.

The goals of planning in aging have not been expressed in quantitative terms. Rather, they have tended to be statements about the general need for planning; responsibilities for planning; activities that are part of planning; and what might be accomplished through planning. In reviewing the evolution of these statements through the past decade, one can see a certain amount of clarification regarding the relations among these various aspects of planning. In particular the need for *leadership planning* (See Section I. Introduction—the Need) is continually stressed even though the specific words used to describe it vary from one goal to another.

A. THE WHITE HOUSE CONFERENCE ON AGING OF 1961

While the Report of the White House Conference on Aging of 1961 did not contain a specific section addressed to planning, discussions of the need for planning were woven throughout the Report. The most comprehensive, single statement about planning, perhaps, was:

Planning and coordination on the National, State, and local levels is essential to assuring the further development of services for older persons. Efficient planning demands the active partnership of National, State, and local agencies, and between public and voluntary agencies. It is recommended that on the local level, overall community planning councils or facilities be established where none exist, to study and analyze needs and resources, to make plans for providing and extending services, and to coordinate existing agencies; that this coordination be extended between the community, county, and State services for aging where they exist; that in the community planning process, whether at local, State, or Federal level, the dignity of the individual and strengthening of family life be safeguarded. Every State should have established on-going mechanisms to promote the development of local community planning, and to promote and coordinate the development of needed services throughout the State—making maximum use of existing State agencies and other resources. Older persons should be encouraged to participate fully on the Federal, State, and local levels in the planning and development of services (*The Nation and Its Older People*, Report of the White House Conference on Aging, January 9-12, 1961, p. 176).

In relation to virtually every need of the aging discussed in the Report, some observation was made about planning. In a section on health needs, for example, the conference recommended that:

... communities periodically study the health needs of their older residents and the total community resources available to meet these needs, as a basis for planning a comprehensive community program. The quality and cost of services should be included in such studies. Factfinding must be followed by interpretation and explanation to all concerned (*Ibid.* p. 157).

In addition each of the sections of the Report that dealt with broad groupings of needs-meeting mechanisms in American society—National Voluntary Services and Service Organizations, Local Community Organizations, State Organizations, and Federal Organizations and Programs—identified planning goals and responsibilities, urging in each instance that older persons be provided with greater opportunities to participate in planning processes and activities.

The White House Conference of 1961 envisioned the planning role of national voluntary organizations as one of giving

... greater assistance to the aging by analyzing their present and potential services to meet needs by (a) effectively communicating with local affiliates in regard to policies and available resources, (b) by informing local affiliates of resources outside their organization, (c) by encouraging the initiation of research, as well as specific programs and projects, where needed, to extend and strengthen programs, and (d) by establishing a procedure for reevaluation of organizations on a regular basis (*Ibid.*, p. 273).

The various organizations were urged to establish "a coordinating council of national voluntary organizations in the field of aging," and to designate one of the organizations

- a. to provide clearinghouse and informational services.
- b. to provide facilities for coordinate [sic] national planning for the aging.
- c. to stimulate pioneering and creative efforts of interested organizations.
- d. to survey existing research, and to identify gaps in research.
- e. to provide liaison with governmental agencies.
- f. to encourage cooperation among local units of member groups.
- g. to coordinate legislative programs of organizations which have committed themselves to such programs.
- h. to provide a channel for combination [sic] of member organizations sponsoring specific programs.
- i. to provide facilities for consultative services to national, State, and local organizations and agencies (*Ibid.*, p. 276).

The Conference also proposed planning linkages between governments and private organizations. It recommended the establishment of a national advisory council "to work with the Federal Government and national voluntary organizations concerned with the problems of the aging," and proposed creation of a coordinating unit in the Federal Government and in each of the States "to utilize the knowledge, experience, and services of the national voluntary organizations." These units were expected to be "concerned exclusively with planning and coordination of activities and should not have responsibilities for operating services" (*Ibid.*).

Virtually all of the Conference's Report on Local Community Organization was directed toward "community planning for the aging." It established as a goal the creation of a Committee (Council, or Commission) on Aging in every local community "through which planning may be done for the good life that can be achieved by and for its older citizens" (*Ibid.*, p. 260). The Report did not specify that these Committees should be either public or private bodies, but urged that

... there should be only one local Committee on Aging responsible for the overall community planning in this field, drawing its membership from both the governmental and voluntary organizations. Wherever possible, this Committee should be part of the overall community planning body (*Ibid.*, p. 261).

The planning functions of each local committee were envisioned as follows:

To engage in community planning in the field of aging for the development of needed services; to collect, study, and disseminate factual data; to identify areas needing research; to encourage, sponsor, and undertake appropriate research; to apply the findings of previous and current research, local or elsewhere, in considering local problems; to concern itself with the prevention of developing problems, as well as dealing with the problems after they occur.

To stimulate, promote, support, evaluate, and implement the development, operation, and improvement of standards of direct service programs but not to engage in the operation of such programs except on a demonstration basis; to stimulate or engage in such action as is necessary to fulfill its planning objectives.

To serve as a medium through which organizations can exchange information, coordinate programs, and engage in joint endeavors; and to serve as a liaison with other organizations including those in other localities and at State and national levels.

To work toward the creation of a statewide coordinating group for the aging where there is none (*Ibid.*, pp. 260-261).

In dealing with State responsibilities for planning in aging, the Conference set forth goals similar to those for local communities. It urged the establishment of a permanent State unit (office, commission, or agency) on aging "to provide statewide leadership in programs for the aging" (*Ibid.*, p. 267). A clear distinction was drawn between the role of existing State agencies already providing services and programs for persons of all ages and the role of leadership planning to be exercised by those proposed new State units on aging:

The major direct services for older persons are not rendered by the special organizational unit [the proposed State Unit on Aging] but by the several State agencies which serve the whole population. This reflects and supports the principal of coordinating social and physical planning to meet the needs of the entire community (*Ibid.*, p. 269).

The specific planning functions to be carried out by the new units were outlined as

- a. To provide a mechanism by which governmental and nongovernmental agencies can coordinate their plans, policies and activities with regard to aging.
- b. To create public awareness and understanding of the needs and potentials of older persons.
- c. To gather and disseminate information about research and action programs, and provide a clearinghouse for current plans and ongoing activities.
- d. To encourage State departments, universities and other appropriate agencies to conduct needed research in the field of aging.
- e. To stimulate training for workers engaged in services to the aging.
- f. To stimulate, guide and provide technical assistance in the organization of local or regional councils or units on aging, and in the planning and conduct of services, activities and projects.

- g. To cooperate with the Federal Government, local governments, voluntary agencies and other groups concerned with problems of aging.
- h. To recommend legislative and administrative action on behalf of the aging (*Ibid.*, p. 268).

Some of the Conference's goals for Federal organizations and programs were designed to facilitate the planning objectives set forth for State and community organizations. It was proposed that the Federal Government provide expanded and refined data on the needs of the aging to serve as a basis for "local and State governments and private groups" in their planning (*Ibid.*, p. 279). And It was recommended that the Federal Government provide short-term support for programs and projects that could lead to fuller development of State and local responsibility for leadership in aging.

For planning in aging within the Federal Government itself, the Conference called for a "Federal coordinating agency in the field of aging" that would be given

- a. A statutory basis [for] independent leadership;
- b. Adequate funds for coordination and other assigned functions through a "line item" appropriation;
- c. Responsibility for formulation of legislative proposals for submittal to Congress;
- d. Responsibility for periodic reviews of and reports on the various Federal programs, departments and agencies working in behalf of older people to achieve their effective coordination and operation (*Ibid.*, p. 279).

B. EXECUTIVE ORDER ESTABLISHING THE PRESIDENT'S COUNCIL ON AGING

President John F. Kennedy took a step toward implementing the objective of leadership planning in aging within the Federal Government in 1962 when he established, through Executive Order, the President's Council on Aging. The Council, consisting of seven Cabinet members and three directors of agencies, was charged with "a continuing study of the overall responsibilities of the Federal Government as they relate to the interests and problems of older people" (Executive Order of the President 11022, 1962). On the basis of this continuing study the Council was expected to fulfill its goal of making periodic recommendations to the President and disseminating information "on the needs of the aging, and policies and programs affecting these needs among all Federal, State, and local Governments and private agencies and organizations which work with other people" (*Ibid.*).

C. THE OLDER AMERICANS ACT OF 1965

The Older Americans Act of 1965 implicitly stated important goals for planning in aging by establishing through legislation certain responsibilities for the AoA and the SUA's. Not all of these functions were explicitly designated as planning activities or responsibilities, but most contemporary practitioners or scholars would regard them as such.

The duties and functions of AoA set forth in the Act of 1965 were to:

- (1) Serve as a clearinghouse for information related to problems of the aged and aging;
- (2) Assist the Secretary in all matters pertaining to problems of the aged and aging;
- (3) Administer the grants provided by this Act;

- (4) Develop plans, conduct and arrange for research and demonstration programs in the field of aging;
- (5) Provide technical assistance and consultation to States and political subdivisions thereof with respect to programs for the aged and aging;
- (6) Prepare, publish, and disseminate educational materials dealing with welfare of older persons;
- (7) Gather statistics in the field of aging which other Federal agencies are not collecting; and
- (8) Stimulate more effective use of existing resources and available services for the aged and aging.

With the possible exception of (3), each of these functions falls within the range of activities and responsibilities described in Section I of this paper as leadership planning. Congress did not explicitly intend to establish a "super" Federal agency for planning in aging. But in effect, it was asking AoA to do all that it could to get existing community, State, and Federal organizations to do a better job of meeting the needs of the aging. Not all of the functions *had* to be directed towards that end, but each *could*. Certainly it was clear that Congress was assigning responsibility for leadership planning in aging at the Federal level to AoA.

Responsibility for leadership planning at the State level was not as clearly designated in Title III of the Act. Some of the provisions seemed to imply responsibilities for administrative planning. It required that each State receiving Federal funds under that Act first submit to the Secretary of Health, Education, and Welfare for his approval a State plan which

establishes or designates a single State agency as the sole agency for administering or supervising the administration of the plan, . . . (Older Americans Act of 1965, P.L. 89-73, Title III, Sect. 303, (1)).

provides for development of programs and activities for carrying out the purposes of this Act, including the furnishing of consultative, technical, or information services to public or nonprofit private agencies and organizations engaged in activities relating to the special problems or welfare of older persons, and for coordinating the activities of such agencies and organizations to the extent feasible (*Ibid.*).

provides for consultation with and utilization, pursuant to agreement with the head thereof, of services and facilities of appropriate State or local public or nonprofit private agencies and organizations in the administration of the plan and in the development of such programs and activities (*Ibid.*).

provides such methods of administration . . . as are necessary for the proper and efficient operation of the plan (*Ibid.*).

sets forth principles for determining the priority of projects in the State, and provides for approval of such projects in the order determined by application of such principles (*Ibid.*).

In requiring such a plan (in order to qualify for funds) Congress had listed a series of planning activities and objectives to be carried out by each State: development of programs, services and facilities; provision of information, consultation, and technical assistance; co-ordination;

liaison; establishment of priorities; and efficient administration, guided by established priorities.

The Act of 1965 gave much less attention to planning at the community level. In providing each designated SUA with grant funds to be passed on to public and nonprofit private organizations within its State, Congress authorized as one of the four purposes of such grants: "community planning and coordination of programs for carrying out the purposes of this Act" (*Ibid.*, Sec. 301). Nothing further was said about the community planning activities that might be undertaken, or the authority or power needed to make them effective.

D. THE PRESIDENT'S TASK FORCE ON OLDER AMERICANS OF 1968

A Presidential Task Force was established by President Lyndon B. Johnson in the fall of 1967 to review the role of the Federal Government in meeting the needs of aging Americans. As part of this responsibility the Task Force reviewed planning for the aging within the Federal Government and within the State governments as well, insofar as the latter was encouraged and financed through Title III of the Older Americans Act. The Task Force did not have responsibility for considering planning efforts of national and local private organizations or local public bodies.

In reviewing the progress of planning in aging within the Federal and State Governments as it had fared through the President's Council on Aging and under the auspices of the Older Americans Act, the 1968 Task Force generally concluded:

... it is evident that the great number of Federal and State agencies operating programs important to the well-being of older Americans are not concerted to provide the kind of sustained and comprehensive approach necessary for effective efforts in meeting the basic needs of older persons. Many of them, while promising in direction, are too fragmented and limited in scale to reverse the trends that bar aging persons from opportunities to participate in the benefits and responsibilities of American life.

The field of aging is in a period of rapid change and growth characterized by splintered, overlapping, and uneven development of governmental activities at both Federal and State levels. Many special programs for the aging are parts of much larger programs having similar objectives for others in the population. Their priorities are determined by a hierarchy of considerations in which the special needs of the aging have relatively minor standing. Therefore, we feel that it is important to provide greater focus and emphasis to the many fragments of governmental activities in this field. (President's Task Force on Older Americans, 1968).

In its analysis of the situation within the Federal Government the Task Force concluded, for a variety of reasons, that neither the President's Council on Aging nor the Administration on Aging had been able to carry out effective leadership planning in aging. To help fill this vacuum it recommended as a goal that

... a Deputy Assistant Secretary for Aging be appointed within the Office of the Assistant Secretary for Individual and Family Services, Department of Health, Education, and Welfare, to provide sustained leadership in helping to develop stronger overall policy focus and program coordination among the wide range of Federal agencies affecting the aging, and to help make the programs of certain of these agencies more responsive to the current and future needs of aging persons (*Ibid.*, p. 114).

Among the responsibilities envisioned for the Deputy Assistant Secretary were: "to conduct continuous analyses and evaluations of policies and programs throughout the government that are relevant to the aging"; to "advise the Secretary on all such matters requiring attention within the Department and act on behalf of the Secretary in pursuing them to see that they receive appropriate attention from the officials directly responsible for them"; and to "undertake similar sustained action in pursuing such matters with appropriate responsible officials of Federal agencies outside the Department" (*Ibid.*).

A parallel review of efforts at planning in aging by State governments led the Task Force to conclude that progress in the States was disappointing also. As an attempt to provide more focus and discipline for State efforts, the Task Force set forth a general goal of strengthening State Plans on Aging under Title III of the Older Americans Act, in the form of a recommendation to the President:

We recommend that State Agencies on Aging authorized under Title III of the Older Americans Act be required, by a fixed date several years hence, to revise State Plans on Aging to comply with a set of criteria which would be established either by the Secretary of HEW or through legislation, for purposes of encouraging the development of more sustained and comprehensive efforts in all communities within their jurisdictions. (*Ibid.*, p. 131).

This was followed by a series of specific goals, intended as measures for realizing the more general goal of strengthened State Plans:

- A. The State Agency on Aging would be required to present a relatively detailed Plan, coordinated with other official plans in its state, including an account of how direct services [described elsewhere in the Report] will eventually be made available and delivered through a variety of auspices to aging citizens throughout the state.
- B. All features of the Plan would be required to include a timetable for implementation.
- C. Plans would include some design for a network of decentralized responsibility (perhaps in connection with a system of information and referral centers) through which direct services in local communities would be developed, stimulated, and coordinated.
- D. Sufficient detail would be included to indicate: how the State welfare department intends to use its funds available under Titles I, XVI, and XIX of the Social Security Act for services to welfare recipients to implement the State Agency on Aging's plan for coverage; how services would be available to aging persons not on welfare; and how welfare and non-welfare services would blend to provide overall coverage.
- E. To the extent that portions of the Plan for service provision are dependent upon time-limited Federal funds for their implementation, States would be required to indicate the source and timing of the ongoing financial support that would establish the services on a permanent basis (*Ibid.*, p. 131).

After recommending measures to improve the planning capability of the staff of SUA's and to increase Federal financial support for State planning staff, the Task Force proposed that a goal of State planning should be to coordinate funding of Title III grants in each State with the provisions of the State Plan:

We recommend that State Agencies on Aging, in making their grant payments from Federal allotments available under Title III of the Older Americans Act, be required to fund only those applications for projects that include a demonstrated relevance to the implementation of their own State Plans on Aging (as strengthened in accordance with the recommendations set forth [above]).

- A. First consideration would be given to applications proposing projects that would both: provide for the planning, development, or direct provision of services to aging citizens in accordance with an unfulfilled priority need identified in the State Plan's design for service coverage; *and* include a substantial and explicit commitment from a specific party to assume financial support for the services when Title III funding terminates.
- B. Second consideration would be given to applications which, while not including an explicit commitment for continuing financial support, propose the planning, development, or direct provision of services in accordance with an unfulfilled priority need identified in the State Plan on Aging (*Ibid.*, p. 143).

One additional major concern of the 1968 Task Force with respect to State planning in aging was that professionals appeared to have been fully controlling, or at least dominating, the content and direction of the planning efforts that had taken place. To the extent that the objectives of planning had been developed in a State, rarely did they seem to have been shaped directly by the needs and concerns of those citizens expected to benefit from planning activities. Consequently, the Task Force set forth as a goal

... more equitable representation of aged persons and minority groups on the governing and advisory bodies established in connection with the administration of State Agencies on Aging, so that they may have an impact upon the nature of the State aging program.

- A. State Agencies on Aging would be required by the Secretary of Health, Education, and Welfare to revise their State Plans to include some provision for older persons and members of locally-relevant minority groups to serve on both their governing and advisory bodies.
- B. The executive of each authorized State Agency on Aging would be required to file an annual statement with the Secretary naming the members of the appropriate bodies and describing the group that each of these members represents. (*Ibid.*, p. 157).

E. THE OLDER AMERICANS ACT AMENDMENTS OF 1969

The initial Older Americans Act of 1965 had authorized funds for programs through June 30, 1967 only. Amendments in 1967 extended this authorization through June 30, 1969. When the Federal Administration sought further extension of fiscal authorization through Amendments in 1969, it also used this opportunity to attempt to reinforce efforts at leadership planning in the States.

AoA was able to obtain from Congress a sharp proportional increase in the funds available to the States under Title III for the specific purposes of planning and administration, as distinguished from program funds. In addition, the need for leadership planning received special attention and emphasis with the adoption of a new paragraph under Title III of the Act, requiring that each State Plan provide "for statewide planning, coordination, and evaluation of programs and activities related to the purposes of this Act..." (Older

Americans Act Amendments of 1969, Sec. 303, (4)). In hearings before Congress the previous year, when these Amendments were first considered, Commissioner William Bechill of the Administration on Aging explained the goals of the new Title III provisions:

This proposed amendment would enable the State agencies to:

- (1) Give increased guidance to programming of services to older persons in the State or local communities; and
- (2) Provide essential State leadership and experience to obtain maximum cooperation from all agencies and organizations which are concerned with the well-being of older persons. These efforts would involve appropriate coordination with organizations concerned with the provision of health and social services. In addition, the new resources will enable the State agencies to engage in more effective planning for older persons which will result in:
 - Development of long-range State plans for its older population;
 - Identification of unmet needs, and the setting of priorities;
 - Evaluation, analysis, and assessment of State programs;
 - Improved methods of cooperation and coordination to avoid duplication;
 - Improved use of all community resources, public and private; and
 - Improved relationships between State and local, and national government programs, and voluntary and private nonprofit agencies (Amending the Older Americans Act of 1965, pp. 8-9).

F. THE PRESIDENT'S TASK FORCE ON THE AGING OF 1970

The President's Task Force on the Aging of 1970 reviewed a considerable range of needs of older Americans and programs established to meet needs in local communities as well as the State and Federal levels. Its analysis of planning, however, was focused on the Federal Government and led to a conclusion similar to that of the 1968 Task Force:

A large number of units of the Federal Government are engaged in a range of complex efforts which directly or indirectly affect the elderly in a variety of ways. While all of these efforts are pertinent, their lack of coordination constitutes a major problem and leaves largely unexplored the possibility of interlocking programs.

This lack of coordination at the Federal level causes concern. No agency has authority to determine priorities, to settle conflicts, to eliminate duplication, to identify and assign responsibility, to search for gaps within and between agencies, to initiate concerted action, to keep Federal agencies constantly aware of how their programs affect the elderly. The Task Force is also concerned about the ways in which these problems become magnified at the State and local levels through Federal agency policies and grants-in-aid programs (President's Task Force on the Aging, 1970).

To overcome these problems the Task Force proposed as a goal the establishment of

...an Office on Aging within the Executive Office of the President. We recommend that the President seek statutory authority for this Office through an amendment to the Older Americans Act but that until such authority can be obtained the President create the Office by issuing an Executive Order.

We recommend that the responsibilities of this Office include: 1) the development of national policy on aging; 2) the overseeing of planning and evaluation of all Federal activities related to aging; 3) the coordination of such activities; 4) the recommendation of priorities to the President; and 5) the encouragement of Federal agencies to undertake research and manpower preparation. We recommend that in addition the Office advise the President on concerns of the aging and alert other government officials to the potential impact of their decisions on the interests of older persons. In our judgment these responsibilities warrant Cabinet level status for this Office (*Ibid.*, pp. 12-13).

For the purpose of improving intradepartmental planning in aging at the Federal level, the Task Force additionally proposed

... that the heads of the human resources agencies—the Department of Health, Education, and Welfare; Housing and Urban Development; Labor; Transportation; and Agriculture; and the Office of Economic Opportunity—develop organizational mechanisms capable of: 1) interrelating each of the programs of their agencies which affect the elderly; 2) assuring that planning undertaken by their agencies does not neglect the elderly; and 3) calling the needs of the elderly to the attention of key decision-makers (*Ibid.*, p. 14).

Throughout the past decade national goals for planning in aging have been set forth by authoritative bodies. Virtually all of them emphasized that planning in aging should largely consist of leadership, all levels of our society, in getting existing public and private organizations that operate generic programs to perform more vigorously and effectively in meeting the needs of aging and aged Americans. None of them was able to set forth, however, a goal that included a consideration of how power might be developed and used for the effective conduct of leadership planning.

III. KNOWLEDGE AVAILABLE

Knowledge available on planning in aging is discussed here in terms of the distinction made in Section I and carried through in Section II—the distinction between leadership planning and administrative planning. In particular the discussion will focus on leadership planning. For without such a focus, much of this Section would consist of a rehash of literature concerning technical planning tools and activities—Program Planning and Budgeting Systems (Novick, 1965), Social Indicators (Bauer, 1966), Long-Range Management Planning (Ewing, 1964), Systems Analysis (Blumstein, 1967), Cost-Benefits Analysis (Gorham, 1968), Decision Theory (Dyckman, 1961), and so on. The observations that could be made about these tools and activities with respect to planning in aging would effectively be the same that would be made about them more generally. Such a discussion might have some interest to scholars and planning technicians, but would probably not be of much value here. For these technical activities do not present a fundamental challenge to the field of aging; presumably they can be applied for the benefit of older persons as well as for any other purpose.

The central challenge to planning in aging is to provide effective leadership—that is, to lead the major generic organizations, which provide programs and services for human beings of all ages, into a better performance with respect to the needs of aging and aged Americans. This fundamental issue was expressed over and over again in the numerous goals for planning set forth by the 1961 White House Conference on Aging. It has been reiterated throughout the past decade.

Knowledge about leadership planning in aging is essentially knowledge about how to get certain public and private organizations to change their policies and patterns of activity. The term leadership planning, understood in this light, is a pleasant euphemism for exercising power or exercising influence. (The two terms—power and influence—will be used synonymously throughout this discussion.) As expressed in a representative definition, influence (leadership planning) is the "ability to get others to act, think, or feel as one intends." (Banfield, 1961). Considerable knowledge is available about how this ability is obtained and effectively exercised. Relatively little of it can be found in literature on planning. Most of it is contained in the literature of political science and organizational behavior. The remainder of this Section will consist of an attempt to adapt the main points of that literature to the central concerns of planning in aging.

Probably the most common type of situation encountered by a planner in the field of aging might be outlined as follows. The planner, whether an individual, group, or organizational mechanism, is an actor with limited influence. He is seeking a goal on behalf of older persons which embodies a proposal for one or more organizations—public or private; national, State, or local—to make a policy change. It might be the extension of a home care service by the visiting nurse association to chronically-ill older persons; the provision of social services to the aging within a Model Cities neighborhood; stricter enforcement of nursing home codes by the State health department; larger allocations of retraining funds, by the Department of Labor, to unemployed older workers.

Outlined in these terms the situation seems simple enough. On the basis of widespread and long-standing experience, it is safe to assume that the target organization will initially resist the proposed change. The only issue would seem to be: does the planner have sufficient influence to overcome the target organization's resistance to the proposed change in its policy?

However, it is in this deceptively simple formulation of the situation that most efforts at effective planning tend to founder. Both the exercise of influence and organizational resistance to planning goals are extremely complex phenomena. Most of us are willing to recognize and acknowledge these complexities in our nonprofessional, day-to-day activities. But for some reason, we tend to ignore them when functioning as professional planners.

To begin with, it is worth noting that influence works in a number of different ways (See Banfield, 1961). Perhaps the most familiar way in which influence works is through *inducement*, that is, changing the behavior alternatives open to the *influencee* or target in such a way that he selects the alternative preferred by the planner. A similar but distinct kind of

influence is *coercion*, in which the target is strictly precluded from behaving in a fashion undesirable to the planner. Both coercion and inducement require the ability to change the actual options open to the influencee. But influence also works without changing behavioral alternatives. It can be exercised through *rational persuasion*; that is, changing the target's perception of the alternatives open to him by improving his logic or information. This can be usefully distinguished from other means of changing the influencee's perception of the options, such as *selling*, suggestion, fraud, or deception. Still another kind of influence, which might be termed *friendship*, relies upon the desire of the target to gratify the influencer. And finally, of course, it is important to take note of *authority*, influence which depends upon the target's sense of obligation, legal or otherwise. All of these—inducement, coercion, rational persuasion, selling, friendship, and authority—are distinctly different ways in which influence works.

While these distinctions may seem obvious and rather elementary, it is amazing how frequently they are ignored in efforts to implement planning goals. Perhaps the most common case is that of the planner who tries to exercise influence through rational persuasion by supplying information and logic to support his goal, when the target of his efforts is basing resistance on factors that have nothing to do with the information and logic provided. The most familiar example of such a target is the board of directors of many hospitals. As Clark and Wilson have pointed out: "Among the trustees and directors of . . . hospitals . . . the personal prestige which membership provides is often a strong incentive. Board members not only contribute prestige to such boards, but their own prestige is enhanced through association with other high-status community figures and with the institutions themselves" (Clark and Wilson, 1961). Board members, as targets for influence, will be most likely to be responsive to proposals which enhance the hospital's prestige and stature, and thereby enhance their own opportunities for recognition. To them, facts about the number of older persons needing home health care, and logical arguments, about the efficient coordination that might be achieved through a joint outreach program carried out by the hospital and the visiting nurse association, may have no effective relevance.

Officers of organizations do not tend to resist innovation because they are ignorant of facts or because they are illogical. Rather, they are predisposed to resist changes embodied in planning goals in aging regardless of the facts. As Herbert Simon, perhaps the country's leading student of organizational behavior, has expressed it: the "existing pattern of organizational behavior has qualities of persistence; it is valuable in some way or it would not be maintained." (Simon, Smithburg, and Thompson, 1961). Officers of organizations do not search for or consider alternatives to their existent course of action unless that course is in some sense unsatisfactory (March and Simon, 1958).

Planning goals in aging, however, are not formulated primarily in an attempt to solve some organization's problems. Rather, the planner is trying to find a solution to a situation affecting older persons—a situation that may have little or nothing to do with the organization's operative incentives. Target organizations are rarely selected with attention to the current states of their internal affairs. And even if the organization finds its own state to be unsatisfactory in some sense, it is unlikely that the policy change presented by a planning goal for aging will be perceived by the organization as a solution to its own problems. It should not be surprising, then, that planning goals are frequently resisted by target organizations.

The complex relations between organizational resistance and the types of influence or power that planners need to overcome resistance is hardly understood in terms of their precise dynamics. A number of questions about organizational behavior and resources for exercising influence need to be answered. It is probably safe, however, to make certain generalizations on the basis of available knowledge.

First of all, it can be said that attempts to exercise power through inducement or constraint are generally more effective than attempts to exercise power through rational persuasion, selling, friendship, or authority. This is because inducements and constraints change the actual behavioral alternatives open to the target. The other means of exercising influence, in contrast, simply change the target's perceptions or feelings about his alternatives.

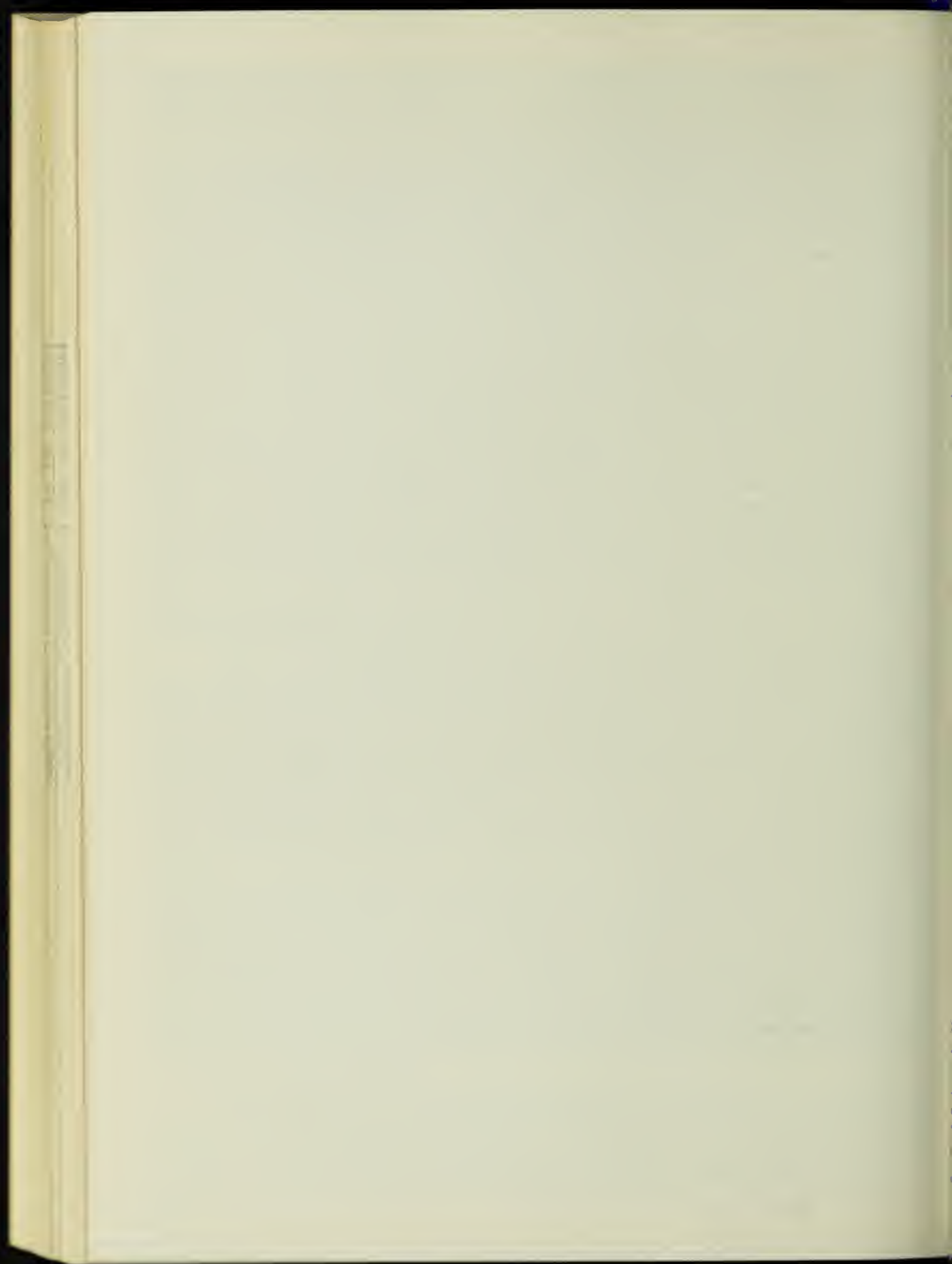
Second, the most helpful resources for exercising power are those that can be used to induce or constrain, such as regulatory control, funds, and broad political support. (There are other resources, of course, that can be used for changing behavior alternatives—e.g. physical force; but they are not particularly relevant for planning.)

Third, it is worth noting that information such as data on the unmet needs of the aging, a favorite resource mobilized by planners, cannot be readily used to induce or constrain. Consequently, it is not one of the more powerful resources for getting organizations to change their policies and patterns of operation. Yet, because of their professional training, planners persist in trying to use information to exercise influence through rational persuasion in circumstances where the target organization is most unlikely to be influenced in this fashion. One simple, though typical, case that might be cited, took place several years ago in San Francisco when a planner attempted to establish a multiphasic screening program for older persons who were not in regular contact with a physician. One of the target organizations, from which a policy change was sought, was the local medical society which was asked to endorse and help organize the screening program. At the time, the leaders of the medical society were deeply embroiled in a public campaign of opposition to Medicare, arguing that the existent private system of medical care for the aged was more than adequate. The planner's proposal, in itself, clearly implied that the existing system of private medical care in San Francisco was inadequate for meeting the health needs of many older persons. Indeed, it was developed by the planner because he thought that system to be inadequate. In this instance, of course, it would have been easy enough to predict the intransigent resistance of the medical society to the planning goal. Yet the planner's strategy for achieving his goal was to try to change the view of the society's directors by marshaling evidence of the gaps in medical care received by indigent older persons, and of the likely effectiveness of a public health screening program in coping with these deficiencies. Needless to say, this effort was not effective in any sense.

Further elaboration of generalizations from available knowledge and endless elaborations of case instances are possible. But the ideas reviewed here, hopefully, are sufficient to highlight the main lesson to be drawn for planning in aging.

The central challenge for establishing effective leadership planning in aging is to develop more powerful resources for influencing existing organizations to change their policies and patterns of operation so as to better serve the elderly. As will be indicated in the next Section of this paper, mechanisms for leadership planning in aging have been created in the last ten years in local communities throughout the nation, in State governments, and at the Federal level. This aspect of the goals of planning in aging has been realized. However, the various planning mechanisms have been relatively ineffective in getting generic organizations to be more responsive to the needs of the aging, because they have relied upon relatively weak resources for exercising power—data on unmet needs, moral legitimacy, presumed prestige or status, and energy and commitment.

The key source of power for influencing public or voluntary organizations is broad popular support. This elementary point has always been obvious in direct relation to influencing legislators and elected administrative officials. But the point is just as salient, though indirect, with respect to public and private allocative and service agencies. Broad popular support can be used to obtain regulatory control and substantial funds. And support, control, and funds can all be used to constrain and induce the generic organizations that are the prime direct targets of leadership planning in aging. If planning in aging is to become more effective during the next decade, it will probably need to develop these resources for power and put them to work.



IV. THE PRESENT SITUATION

In the past ten years mechanisms for leadership planning in aging have been established in communities throughout the nation, as well as within the Federal and State governments. Hundreds of councils, committees, offices, commissions, and other types of units on aging have come into being since the last White House Conference. Overall, however, their impact upon the policies and operational patterns of existing generic organizations has been slight; for the reason that the proliferation of these units on aging has not been matched by a development of sufficient power for them to carry out their functions.

A. FEDERAL PLANNING IN AGING

The need for leadership planning within the Federal Government is as great today, and probably greater, than it was at the time of the 1961 White House Conference. Scattered among the various departments and offices of the Federal Government are approximately 20 agencies with statutory responsibility for an extensive variety of programs and services for the aging and aged. And there are dozens of additional Federal operations that have considerable, if indirect, relevance.

The challenge of coordinating diverse government programs into sustained and comprehensive policies and operations is always difficult. But the proliferation and distribution of activities and responsibilities requiring coordination to meet the needs of the aging seem exceptional.

In the area of income maintenance alone, nine agencies have relevant programs. In the Department of Health, Education, and Welfare, the Social Security Administration and the Social and Rehabilitation Service administer the major public income maintenance program for older people—Old Age, Survivors, Disability, and Health Insurance (OASDHI). They also make grants to the States for Old Age Assistance, Aid to the Blind, and Aid to the Disabled. The Railroad Retirement Board is responsible for a social insurance program for railroad employees and their families. The Civil Service Commission administers a Public Retirement, Disability, and Health Benefits System for Federal retirees. Retired veterans, their families and dependents receive cash payments from the Veterans Administration. In fiscal 1970 the Department of Defense had a \$340 million program for retirees. The Department of Labor supervises the administration of the Federal-State unemployment insurance program. The Department of the Treasury administers special tax provisions for aged citizens, and the food stamp and surplus commodities programs of the Department of Agriculture serve many aging persons.

Many agencies have programs related to employment of the older worker. The Department of Labor provides counseling, training programs, and placement services. The Office of Economic Opportunity initially developed special programs employing older poor persons such as the Foster Grandparent Program, Operation Medicare ALERT, and Projects FIND and Green Thumb. Three agencies in the Department of Health, Education, and Welfare are involved in this area. The Rehabilitation Services Administration provides rehabilitative services and sheltered workshops for older handicapped workers, and sponsors various research and demonstration projects on helping the older disabled worker return to employment. The Administration on Aging supports several demonstration projects relating to older workers. The vocational education programs of the Office of Education are yet another resource.

The Department of Health, Education, and Welfare administers the major health programs. Of prime importance to older people are Medicare; Medicaid; the Hill-Burton construction program for hospitals and related facilities; research on the health of the aging through the National Institutes of Health, the Bureau of Health Services, the National Institute of Mental Health; food and drug protection; and rehabilitation services for the chronically ill and aging. The Office of Economic Opportunity has made available grants for the training of home health aides and for demonstrations in home care services to elderly persons in low income areas. The Department of Housing and Urban Development provides mortgage

insurance for construction of both proprietary and non-profit nursing homes. Loans to privately owned hospitals, nursing homes, and other health facilities are made by the Small Business Administration. The Veterans Administration operates many medical care facilities directly, and is particularly concerned with long-term care programs for older and chronically-ill veterans, as well as being active in research on aging. Even the Atomic Energy Commission supports research bearing on the health of the aging. A health program for retired military personnel is administered by the Department of Defense, and the Civil Service Commission is responsible for all retirees who are covered by the Federal Employees Health Benefits Act. The Department of Agriculture, the Office of Economic Opportunity, and the Administration on Aging give attention to the nutrition of older people.

Both the Department of Agriculture and the Department of Housing and Urban Development administer programs to help meet the housing needs of older persons. In addition to low-rent public housing units, Housing and Urban Development has several newer programs, including rent supplements, that help provide a broader range of housing.

Training of professional, semi-professional, and technical personnel in the field of aging is supported by grants from the Administration on Aging, the National Institute of Child Health and Human Development, and the National Institute of Mental Health through specially earmarked programs. Education and training of older persons is provided through programs in the Office of Education, the Civil Service Commission, the Federal Extension Service of the Department of Agriculture, and the Department of Labor under the Manpower Development and Training Act.

Most of the direct social service programs supported by the Federal Government are lodged in Health, Education, and Welfare. But the Office of Economic Opportunity has made some grants to support services to the elderly poor, and the Model Cities program has undertaken some limited attempts to develop services in facilities lodged within specialized housing for older persons.

Even though the number of agencies involved in programs and activities related to the aging has increased in the last decade, the situation was sufficiently complex in 1961 for the White House Conference to regard coordination of Federal programs as a major goal. In the last ten years, progress toward meeting this goal has been quite limited, and the practical consequences are evident.

Many problems falling within the domain of two or more agencies, for instance, receive virtually no attention from any of them because when an issue is raised, each agency interprets it as a matter for another agency's attention. The result is often that none of them makes any sustained efforts to cope with the problem. For example two programs within Health, Education, and Welfare have funds available for sophisticated applied social research that could yield immediate practical implications for coping with the problems of older persons. Neither program has used more than a small amount of its research funds for this purpose. When the administrators of these programs have been pressed to develop more projects for sophisticated social research, they have tended to respond by suggesting that this function is the appropriate province of the other.

Some departments and agencies nominally responsible for matters of importance to the aging actually pay little attention to them because other matters claim their priority attention. But since they are nominally responsible, the problem is not picked up elsewhere. The Department of Housing and Urban Development, for example, is nominally responsible for the inclusion of facilities and services for older persons within Model Cities plans and programs. To the extent that the Department regards this responsibility as a matter of low priority, however, it will in fact invest little agency effort. On the other hand, no other agencies are in a position to substantially complement or substitute for its efforts.

Still other agencies not nominally responsible for programs in aging are, nonetheless, dealing with general matters that have important implications for the aging. For instance, the Department of Transportation is importantly influencing the future development of mass transportation systems but it is apparently paying little serious attention to special residential patterns and physical limitations that may very well exclude many elderly persons from effective access to those systems.

Aside from the general desirability of policy coherence and greater attention to the aging in many programs within the Federal Government, sustained effort is needed to concert the Federal resources for the aging that are distributed to communities and States throughout the nation. Some Federal grants-in-aid funds are not used for the purposes for which they were intended. For example, even many of the States that accept grants under Title I of the Social Security Act to provide social services to older persons use only a small proportion of these funds for actual services. The greater part is spent instead for administrative costs associated with distributing income maintenance payments. In several States the directors of welfare have publicly declared that services for the aging are the least of their service concerns.

Similarly, several Federal sources may provide separate grants to the same community for the same service in circumstances in which far more service potential is being supported than could possibly be utilized by the local population. In one instance, for example, three Federal agencies funded three projects of the same type for the elderly in the same city, all within relatively easy reach of a target population that most probably could have been readily served by one such project. It would hardly be realistic to expect State and local communities to carry the entire burden of effective coordination in such matters.

As indicated in Section II. Long-Range Goals, two major steps have been taken during the past ten years in an attempt to realize the 1961 White House Conference's goal of Federal leadership planning in aging. One was the establishment of the President's Council on Aging (PCA) through an Executive Order in 1962. The other was the creation of the Administration on Aging through enactment of the Older Americans Act of 1965, as an agency reporting directly to the Secretary of Health, Education, and Welfare. Neither mechanism has been particularly successful for improving planning in aging within the Federal Government, even though the objectives set forth for them clearly included this responsibility (See Section II. above).

In the eight years of its largely intermittent existence, the PCA has been able to do little of a practical nature. In those years when it has issued its annual report to the President, it has suggested little that provides a policy focus for the Federal Government's efforts in aging. A PCA report typically consists of a recapitulation of legislation and activities in recent years, a summary of increases in Federal expenditures in assistance for the aged, and an abstract of a Presidential message on the elderly.

By its very nature the Council can do little to shape the direction of Federal efforts in aging. As an inter-agency group representing virtually all major interests in aging, it cannot be expected to disturb the *status quo*. At most, its members will agree that each of the programs they represent deserves more financial support. On occasion it has developed a proposal for a project to demonstrate the possibility of inter-agency cooperation, but such proposals have little significance beyond the demonstration of cooperative intent.

AoA's specific responsibilities for planning and coordination at the Federal level were established under Title II of the Older Americans Act of 1965. (See Section II. above for a recapitulation of these responsibilities). It has certainly been more active than the PCA in undertaking some efforts to bring about inter-agency innovations and greater response by certain agencies to the special needs and problems of the aging.

The actual accomplishments of AoA in these efforts have been limited because it has been difficult for it to assume a role of leadership. It has little national visibility, and its prestige and power within government are limited. Its annual budget is miniscule in comparison with those of other activities of importance to aging Americans. Most importantly, it has been preoccupied with administering its grants-in-aid program to the States, its research and demonstration program, and its training program. Until the last year or so, it has devoted little in the way of staff resources for attention to government-wide activities and issues of overall Federal policy.

A reorganization within the Department of Health, Education, and Welfare in August of 1967 downgraded AoA. The Commissioner, who formerly reported directly to the Secretary, now reports to the Administrator of the Social and Rehabilitation Service (SRS), and AoA has become one of a number of divisions within SRS. Some of the others, for

example, are: the Medical Services Administration, the Rehabilitation Services Administration, the Assistance Payments Administration, and the Community Services Administration. A great proportion of professionals active in the field of aging have been highly critical of this reorganization. Many of these critics feel that AoA has been so severely downgraded that its potential for government-wide leadership effectiveness has been substantially reduced. This may seem true in terms of organizational charts, but there has been no indication that the practical effect has been particularly significant for AoA's intragovernmental role in providing leadership and sustained inter-agency efforts. The overall operation of AoA has been substantially the same since the reorganization. If anything, its efforts at planning leadership have slightly increased rather than decreased, largely due to AoA's recent determination to enlarge this role.

The President's Task Force of Older Americans of 1968 recognized the difficulties that AoA was having in fulfilling a leadership role for planning in aging at the Federal level. In trying to determine the reasons for this difficulty, the Task Force identified several factors which seemed to be limiting AoA's potentialities for leadership.

First, AoA had been assigned "responsibilities" for planning in aging, but it had not been provided with statutory authority that would enable it to shape or control in any way the activities or other units within the Federal Government. Therefore, its opportunities for leadership had to rest upon its capacities for creativity and salesmanship both inside and outside Health, Education, and Welfare, and upon its use of its own programmatic funds to induce other government units to undertake new or revised projects and procedures.

Second, AoA was effectively precluded from devoting a major portion of its funds and staff resources to planning leadership within the Federal Government. Nearly three-fourths of its annual appropriations had to be passed on to State governments in accordance with procedures established legislatively under Title III of the Older Americans Act. The remaining one-fourth, under Title IV (Research and Development) and Title V (Training), however, was subject to more discretionary use by the Commissioner.

Third, the relative newness and fragility of AoA led it to use those financial and staff resources over which it did have some discretionary control for purposes other than Federal planning leadership. It was theoretically possible for Title IV and V funds and staff to be used for joint ventures with other Federal agencies that would lead to new or coordinated policies and programs to benefit the aging. But AoA's natural concern with its immediate survival led it to use these resources for other purposes that might have more immediate and tangible results that could be reported when it sought annual appropriations and extensions of its funding authorization. Title IV and V funds were mostly allocated to projects that would enable AoA to make relatively swift and favorable reports to Congress and the Secretary on the number of older persons who had been directly served through its programs, and the number of persons who had been trained to serve older persons. This may have been a sound decision for enabling AoA to survive. Congressmen are generally responsive to concrete reports concerning the number of persons helped, and increases in the personnel available to help them; they are not so responsive to relatively abstract reports about progress in planning.

Concluding that AoA was not able to exercise effective Federal leadership planning in aging, the 1968 Task Force explored a number of alternatives. In evaluating each alternative it applied two general criteria: the extent of genuine commitment that any given unit within the Federal Government might have for meeting the concerns and needs of older Americans; and the sources of power (statutory authority, funds, energy and creativity, status) that could genuinely enable leadership to be exercised. In addition, of course, the Task Force weighed the practical prospects for getting a desired alternative implemented. As it turned out, the Task Force was not particularly satisfied with any of the alternatives that it explored.

One of the first alternatives considered was a Commission on Aging within the Executive Office of the President. This was suggested by the notion that leadership planning requires an overview of all Federal activities. It was apparent that such an office could be structured to have visibility and a genuine commitment to older Americans. But the Task Force did not see how it could be very powerful. Except in very extraordinary circumstances, when the President might be able to give the Commission some of the attention that he must

continually focus upon scores of vital matters, it was difficult to envision how such a Commission might accomplish much of a concrete nature. In the Task Force's view, it seemed that a Presidential Commission might even have difficulty obtaining from agencies the information that would be essential for leadership planning. It might often find that its proposals were vigorously opposed out-of-hand by officials responsible for operating activities.

Another alternative was a non-profit Institute for Policy Analysis in Aging. A program of this kind, however, did not seem likely to have sufficient direct contact with operating activities within the Federal Government. More importantly, there was no reason to believe that recommendations made by such an Institute would receive a substantially greater response within the Federal Government than that accorded the recommendations of others outside government during the years, including the White House Conference on Aging of 1961.

A similar suggestion was that there be national periodic task forces to make recommendations that would provide policy focus and program coherence for the aging-related activities of the Federal Government. But this possibility was dismissed, too, because such task forces would not only lack sufficient direct contact with operating activities but would be unable to undertake sustained and powerful efforts at providing leadership.

With these possibilities deemed less than satisfactory, the Task Force turned its attention to alternative arrangements within existing Federal departments. Attention focused in particular upon the Department of Health, Education and Welfare because it has the most important and largest number of activities relevant to the most fundamental needs of the aging. It also has by far the greatest amount of resources that could be usefully exchanged in cooperative activities with agencies in other departments that might be led to direct more of their activities toward helping older Americans.

Already existing within the Department of Health, Education, and Welfare was the Office of Assistant Secretary for Planning and Evaluation. But a review of the activities of this Office quickly indicated that it was engaged in administrative and program planning for the Department as a whole, and that leadership planning on behalf of a particular clientele, such as the aging, would not fit in well with this unit's functions. Moreover, it was clear that it would be virtually impossible for staff in that Office to function with an overriding concern for older Americans.

Finally, the Task Force determined that the most viable though less satisfactory alternative would be to create a new position within the Department of Health, Education, and Welfare having at least nominal prestige, its own planning staff, and no other responsibility than Federal leadership planning in aging. The position of Commissioner of the Administration on Aging had some potential prestige since the Commissioner was a Presidential appointee; but this potential had not been developed. It was possible to establish a planning staff under the Commissioner, where it would be close to the operations of AoA. But the Task Force judged it likely, from past experience, that such a staff would have much of its time used up by responding to pressing operational situations bearing upon the operations and survival of AoA.

With these considerations in mind the Task Force proposed, as a step toward realizing the goal of Federal leadership planning in aging, the creation of the Office of Deputy Assistant Secretary for Aging, within the Office of the Assistant Secretary for Individual and Family Services, Health, Education, and Welfare. (See Section II. Long-Range Goals for some of the specific provisions of this recommendation.) It was recognized that the probabilities of a Deputy Assistant Secretary exercising effective leadership would depend heavily upon the qualities of the individual who might be appointed to the position. He would have no direct base of power, and only a small staff for analyzing activities important for the aging distributed throughout the Federal Government.

It was felt, however, that the creation of this position within itself would do much to enhance the nationwide visibility and prestige of older Americans and their needs, and that this, in turn, might help the Deputy Assistant Secretary educate and favorably influence a number of individuals and organizations, both inside and outside the government. Since he would not have the responsibility of administering an operating activity, he and his staff would be free (unlike AoA) to devote their full energies to the development of overall policy focus,

coordination, and government-wide responsiveness to the aging. His position, his visibility, and his prestige might make it possible for him to develop effective communication and relations with the Secretary and other influential officials both within and without the Department. But the Task Force recognized that he would have some chance of making an impact only if he were extremely capable and qualified.

In the spring of 1968 the Secretary of Health, Education, and Welfare, Wilbur Cohen, agreed to create this position of Deputy Assistant Secretary for Aging. When a specific person to whom he offered the job was unable to accept, nothing further was done.

Professionals in the field of aging continued to press, however, for some step that would improve capabilities for Federal leadership planning in aging. President Nixon responded in the spring of 1969 by designating the new Commissioner of AoA, John B. Martin, as Special Assistant to the President for the Aging. This position involves advisory responsibilities for Federal planning in aging, but no specific powers. In effect, the creation of this new position was an attempt to reinvigorate the prestige of the office of Commissioner of AoA.

In the ensuing months Commissioner Martin has been able to take advantage of the enhanced prestige conferred by this new position. His favorable relations with high-level officials in other parts of the Federal Government continued to develop, with the interests of aging represented in a number of White House councils, study groups, and ad hoc meetings. In these settings it has been possible to press for more attention to the needs of older Americans within more general programmatic and policy deliberations, such as those of the President's Council on Urban Affairs.

At the same time, most qualified observers who have had a chance to analyze Federal activities related to aging during the past two years have concluded that in terms of actual impact, this new mechanism has not been able to accomplish much for older Americans at the Federal level. Most professionals in the field, and most aging American citizens, seem to feel that the diverse Federal programs are less sensitive to the concerns and needs of older Americans and no more coordinated on behalf of the aging than before (See U.S. Senate Special Committee on Aging, 1970).

This general concern was deeply shared by the President's Task Force on the Aging of 1970. Its *top priority*, among 24 proposals, was given to a recommendation designed to develop and strengthen Federal leadership planning in aging. The Task Force saw the problem as follows:

... in enacting the Older Americans Act, Congress intended the Administration on Aging to serve as the Federal focal point on aging. The experience of the Administration on Aging during the last four years, however, makes it abundantly clear that interdepartmental coordination cannot be carried out by a unit of government which is subordinate to the units it is attempting to coordinate. Nor does the experience of the President's Council on Aging suggest that such coordination can be accomplished effectively through a committee (President's Task Force on Aging, 1970).

Accordingly, in its search for Cabinet level status for Federal leadership planning in aging, the Task Force proposed that the President create an Office on Aging within the Executive Office of the President, and seek subsequent legislative authorization for it through an Amendment to the Older Americans Act. (See Section II. Long-Range Goals for the specific, detailed provisions.) As its third priority, the Task Force proposed that Health, Education, and Welfare, Housing and Urban Development, Labor, Transportation, Agriculture, and Office of Economic Development each develop internal mechanisms for coordinating intradepartmental activities related to the aging. Nearly a year after the Task Force Report was released, neither of the two proposals had been acted upon.

The 1970 Task Force had explored the same general range of issues as had the 1968 Task Force, but had decided to place a "fuller range of bets." It had extended to five departments and to OEO the general principle embodied in the earlier Task Force's

recommendation for a Deputy Assistant Secretary for Aging in Health, Education, and Welfare. Unlike the 1968 Task Force, it decided that it had nothing to lose by trying to add the prestige of the Presidency to leadership planning in aging by recommending an Office on Aging in the Executive Office of the President.

The key words in these latest recommendations, outlining the duties of the mechanisms proposed by the 1970 Task Force—"development of national policy;" "overseeing of planning;" "coordination;" "recommendation;" "encouragement;" "advise;" "alert;" "interrelating . . . programs;" "assuring;" and "calling the needs of the elderly to the attention"—echo and parallel the basic flaws of the President's Council on Aging, the Administration on Aging, and the Deputy Assistant Secretary for Aging proposed by the 1968 Task Force. Each of these mechanisms and proposed mechanisms have been given a variety of *responsibilities* for leadership planning in aging, but none have been given the *power* necessary to carry out those responsibilities.

The challenge of providing adequate power to whatever mechanism might carry out leadership planning in aging at the Federal level was implicitly recognized by the White House Conference on Aging of 1961. It urged "that the Federal coordinating agency in the field of aging should be given . . . adequate funds for coordination . . . through a 'line item' appropriation . . ." (*The Nation and Its Older People*, p. 279). But none of the steps taken or proposed for implementing Federal planning in aging have heeded this plea.

As the 1971 White House Conference on Aging approaches, Federal leadership planning in aging is still more a goal than a reality. The responsibility for planning in aging at the Federal level has been recognized. Several mechanisms have been assigned that responsibility. Yet none has been given the power to carry out that responsibility. The source of that power could be funds. It could be regulatory authority granted through Congressional legislation. Or it could be concerned and aroused constituencies of older Americans. But unless that power is developed through one source or another, the goals of Federal planning in aging are likely to remain unfulfilled throughout the 1970's.

B. STATE PLANNING IN AGING

The proliferation of Federal programs and activities affecting aging and aged Americans is paralleled within each State government. To be sure, the specific organizations and arrangements for programs and services vary from State to State. But the major challenge for planning in aging within each State is the same. It is to get generic organizations to be more sensitized to the needs of the aging and to be more effective in meeting these needs.

As indicated in Section II. above, the White House Conference on Aging of 1961 proposed that a unit on aging be established in every State, with responsibility for leadership planning. The Conference also urged that these units have no responsibilities for direct program and service operations.

Enactment of the Older Americans Act of 1965 was an important step toward the realization of this goal in that it authorized funds to encourage the establishment of State Units on Aging and to provide them with ongoing support. Title III of the Act authorizes a two-tiered grant program in which the States (including the District of Columbia, the Virgin Islands, Puerto Rico, Guam, American Samoa, and the Trust Territories) have considerable autonomy and opportunity for initiative and creativity. A designated State Unit on Aging (so designated by the Governor) receives one annual sum to help meet the costs of statewide planning, coordination, and administration, and another sum to be distributed selectively, by the Unit, in response to Title III Program Grant proposals for projects to establish, demonstrate, and expand programs and services for older Americans. The conditions that States have to meet in order to qualify for these Federal funds, including the filing of a "State plan" with AoA, are fulfilled rather easily and are quite non-directive. The amount of funds received by a State is determined through legislation that provides an equal sum to all States plus an additional sum to each in accordance with a formula based upon the number of persons in the State who are 65 years of age and older.

By the end of fiscal 1969 all but three States (Alabama, Indiana, Wyoming), American Samoa, and the Trust Territories were qualified for and receiving Federal allotments under Title III. But it was also becoming clear to officials in AoA, as well as to the President's Task Force of 1968, that the Title III program was experiencing difficulties. Direct observation, discussions with State and local personnel, and analyses of records conveyed a clear impression that a majority of the State Agencies on Aging were operating as little more than "pipelines" for the distribution of Federal funds through Title III Program Grants, supporting projects that were relatively unrelated to any guiding developmental conception.

A significant problem seemed to be a lack of policy focus. Few of the State Plans on Aging reflected or provided any priority or direction for the States' efforts in aging. The Plans were generally characterized by vague and diffuse goals that were simply restatements of fashionable broad objectives among professionals in the field of aging. There was rarely any indication of priority among these goals. More importantly, the Plans were not developed on the basis of any systematic analysis of unfulfilled priority needs in the State.

That the Plans did not provide a sufficient framework for policy focus and program direction was reflected in the activities of the State Agency Executives and informally stated conceptions of their objectives. A survey of these executives indicates that most of them tended to describe aims that had little relationship to those set forth in their State Plans on Aging, either in content or priority. The proportions of time that they and their staffs invested in various activities were also not very clearly related to the Plans. And the Title III program grants were being passed on to local organizations in almost random fashion, generally unrelated to long-term strategies for meeting the needs of the aging.

Overall, the weakness of the Title III program was that it did not seem to be making much impact upon the programs and operational patterns of existing generic organizations. The intent of Title III was to help support each SUA so that it could work with other State and local instrumentalities to achieve a more sustained and comprehensive response to the needs of older Americans. The SUA was not expected to take over the responsibilities and functions of these organizations. The Older Americans Act had stated quite clearly that the designated SUA "shall be primarily responsible for coordination of State programs and activities related to" the objectives for aging citizens set forth in Title I of the Act. Yet many of the SUA's seemed to be drifting into a pattern in which they were developing their own service and program operations.

In recognition of these difficulties, AoA sought amendments to the Older Americans Act in 1969 that would serve to reemphasize the central purpose of the Title III program, and provide additional funds for carrying it out. A new paragraph in Title III underlined the objective of leadership planning by asserting that a State Plan "provides for statewide planning, coordination, and evaluation of programs and activities related to the purposes of this Act" (*Older Americans Act Amendments of 1969*, Sec. 303, par. 4). In addition the minimum allotment made to each State specifically for "State plan administration" (as distinguished from program grants) was increased from \$25,000 to \$75,000. It was hoped that this further support would enable the SUA's to recruit additional qualified planning staff with adequate technical skills for developing stronger State Plans and implementing them.

A review of superficial data would seem to indicate that leadership planning in the States has been considerably strengthened through the 1969 Amendments. It will be suggested below, however, that this is probably not the case. The amounts of money spent on statewide planning, the amounts and proportions of it spent on planning personnel, and the number of SUA personnel nominally engaged in planning all increased sharply from fiscal 1969 to fiscal 1971. By then, all jurisdictions except American Samoa were receiving Title III funds. Tables 1-7 show these changes in terms of: the nationwide and average totals for State planning budgets, including funds from both State and Federal sources, with a State-by-State breakdown; nationwide and average totals for State personnel costs in planning, broken down by specific personnel functions; and nationwide and average State planning staff effort, broken down by personnel categories.

TABLE 1.—NATIONWIDE BUDGETS FOR STATE PLANNING IN AGING

A. Nationwide Total of Budgets for Planning

(thousands)			
Budget category	FY 1969	FY 1970	FY 1971
Personnel	\$ 2,203	\$ 2,850	\$ 4,692
Contracts	134	1,393	411
Other	882	1,344	1,639
Total	3,219	5,587	6,724

B. Average State Budget for Planning

(thousands)			
Budget category	FY 1969	FY 1970	FY 1971
Personnel	\$43,170	\$ 53,760	\$ 85,290
Contract	2,650	26,250	7,480
Other	17,290	25,400	29,780
Total	63,110	105,410	122,550

C. Nationwide Percent Distribution of State for Planning

(percentages)			
Budget category	FY 1969	FY 1970	FY 1971
Personnel	69	51	70
Contracts	4	25	6
Other	27	24	24
Total	100	100	100

Source: Unpublished data from the Administration on Aging, 1970.

TABLE 2.—INDIVIDUAL STATE BUDGETS FOR PLANNING IN AGING FOR
FISCAL YEAR 1969 (ACTUAL), WITH FEDERAL SHARES

State	Total amount	Federal share
All States	\$3,218,815	\$1,729,434
Alabama	*	*
Alaska	22,000	25,000
Arizona	20,305	25,000
Arkansas	32,000	26,584
California	191,210	89,115
Colorado	56,301	25,000
Connecticut	91,936	29,219
Delaware	37,985	25,000
District of Columbia	51,775	25,000
Florida	56,415	47,918
Georgia	75,111	31,919
Hawaii	30,917	25,000
Idaho	25,173	25,000
Illinois	60,875	64,350
Indiana	*	*
Iowa	59,947	32,585
Kansas	17,022	27,720
Kentucky	44,612	31,222
Louisiana	65,170	29,264
Maine	34,128	25,000
Maryland	56,911	26,560
Massachusetts	149,308	44,235
Michigan	106,610	44,480
Minnesota	63,381	34,581
Mississippi	26,596	25,000
Missouri	55,133	40,838
Montana	23,094	25,000
Nebraska	27,057	25,000
Nevada	19,500	9,750
New Hampshire	35,546	25,000
New Jersey	85,115	41,600
New Mexico	50,000	25,000
New York	448,031	100,862
North Carolina	52,177	33,551
North Dakota	12,016	25,000
Ohio	107,866	57,933
Oklahoma	46,672	29,405
Oregon	39,885	26,526
Pennsylvania	128,803	70,690
Rhode Island	55,529	25,000
South Carolina	55,951	25,000
South Dakota	9,593	25,000
Tennessee	72,625	30,855
Texas	71,989	56,576
Utah	45,438	25,000
Vermont	25,330	25,000
Virginia	51,378	29,120
Washington	45,532	30,640
West Virginia	48,466	25,483
Wisconsin	103,464	35,853
Wyoming	*	*
Guam	18,636	25,000
Puerto Rico	69,900	25,000
Virgin Islands	38,501	25,000
Sarnoa	0	0

*Not Reported

Source: Unpublished data from the U.S. Administration on Aging, 1970.

TABLE 3.—INDIVIDUAL STATE BUDGETS FOR PLANNING IN AGING FOR
FISCAL YEAR 1970 (ACTUAL), WITH FEDERAL SHARES

State	Total amount	Federal share
All States	\$5,586,695	\$4,000,000
Alabama	40,308	75,000
Alaska	44,242	75,000
Arizona	50,428	75,000
Arkansas	95,169	75,000
California	270,280	75,000
Colorado	99,438	75,000
Connecticut	134,599	75,000
Delaware	33,752	75,000
District of Columbia	103,392	75,000
Florida	86,910	75,000
Georgia	145,191	75,000
Hawaii	168,118	75,000
Idaho	64,195	75,000
Illinois	63,046	75,000
Indiana	-	75,000
Iowa	105,087	75,000
Kansas	18,627	75,000
Kentucky	100,000	75,000
Louisiana	118,236	75,000
Maine	100,000	75,000
Maryland	135,045	75,000
Massachusetts	213,351	75,000
Michigan	107,478	75,000
Minnesota	99,305	75,000
Mississippi	20,327	75,000
Missouri	102,562	75,000
Montana	54,236	75,000
Nebraska	54,492	75,000
Nevada	21,139	75,000
New Hampshire	92,043	75,000
New Jersey	136,810	75,000
New Mexico	92,548	75,000
New York	613,750	75,000
North Carolina	94,293	75,000
North Dakota	69,852	75,000
Ohio	164,601	75,000
Oklahoma	100,000	75,000
Oregon	56,240	75,000
Pennsylvania	193,090	75,000
Rhode Island	105,390	75,000
South Carolina	55,951	75,000
South Dakota	18,508	75,000
Tennessee	111,673	75,000
Texas	124,722	75,000
Utah	101,500	75,000
Vermont	81,198	75,000
Virginia	104,497	75,000
Washington	105,360	75,000
West Virginia	110,170	75,000
Wisconsin	135,168	75,000
Wyoming	-	75,000
Guam	31,471	25,000
Puerto Rico	123,400	75,000
Virgin Islands	53,707	25,000
Samoa	0	0

Source: Unpublished data from the U.S. Administration on Aging, 1970.

TABLE 4.—INDIVIDUAL STATE BUDGETS FOR PLANNING IN AGING FOR
FISCAL YEAR 1971 (ESTIMATE), WITH FEDERAL SHARES

State	Total amount	Federal share
All States	\$5,514,669	\$4,000,000
Alabama	114,672	75,000
Alaska	100,000	75,000
Arizona	100,000	75,000
Arkansas	100,000	75,000
California	162,455	75,000
Colorado	140,726	75,000
Connecticut	154,000	75,000
Delaware	100,000	75,000
District of Columbia	110,395	75,000
Florida	100,000	75,000
Georgia	150,776	75,000
Hawaii	102,552	75,000
Idaho	100,000	75,000
Illinois	105,437	75,000
Indiana	108,251	75,000
Iowa	105,087	75,000
Kansas	100,000	75,000
Kentucky	100,000	75,000
Louisiana	123,417	75,000
Maine	100,000	75,000
Maryland	130,218	75,000
Massachusetts	213,351	75,000
Michigan	177,643	75,000
Minnesota	119,527	75,000
Mississippi	117,049	75,000
Missouri	102,562	75,000
Montana	56,012	75,000
Nebraska	84,835	75,000
Nevada	100,000	75,000
New Hampshire	100,000	75,000
New Jersey	136,810	75,000
New Mexico	100,000	75,000
New York	575,000	75,000
North Carolina	101,177	75,000
North Dakota	68,000	75,000
Ohio	181,551	75,000
Oklahoma	100,000	75,000
Oregon	100,000	75,000
Pennsylvania	203,750	75,000
Rhode Island	137,650	75,000
South Carolina	122,851	75,000
South Dakota	33,190	75,000
Tennessee	117,234	75,000
Texas	125,332	75,000
Utah	101,500	75,000
Vermont	85,872	75,000
Virginia	103,635	75,000
Washington	119,974	75,000
West Virginia	112,785	75,000
Wisconsin	171,283	75,000
Wyoming	21,000	75,000
Guam	53,836	25,000
Puerto Rico	100,000	75,000
Virgin Islands	57,927	25,000
Samoa	0	0

Source Unpublished data from the U.S. Administration on Aging, 1970.

**TABLE 5.—NATIONWIDE BUDGETS FOR STATE PLANNING PERSONNEL,
BY PERSONNEL FUNCTIONS—NATIONWIDE STATE PLANNING
PERSONNEL COSTS**

(thousands)			
Category	FY 1969	FY 1970	FY 1971
Executive	\$ 562	\$ 642	\$ 820
Planning	124	268	787
Program	484	619	1,103
Grants management	376	375	556
Public information	40	67	150
Other	617	879	1,276
Total	2,203	2,850	4,692

Source: Unpublished data from the Administration on Aging, 1970.

**TABLE 6.—NATIONWIDE BUDGETS FOR STATE PLANNING PERSONNEL
BY PERSONNEL FUNCTIONS—AVERAGE STATE PLANNING COSTS**

(thousands)			
Category	FY 1969	FY 1970	FY 1971
Executive	\$11,019	\$12,113	\$14,909
Planning	2,431	5,056	14,309
Program	9,490	11,679	20,054
Grants management	7,372	7,075	10,109
Public information	784	1,264	2,727
Other	12,098	16,584	23,200
Total	43,194	53,771	85,308

Source: Unpublished data from the Administration on Aging, 1970.

**TABLE 7.—NATIONWIDE AND AVERAGE STATE PLANNING STAFF,
BY PERSONNEL CATEGORY**

A. Nationwide State Planning Staff

(in man-years)			
Category	FY 1969	FY 1970	FY 1971
Executive	47	51	55
Planning	13	36	70
Program	66	72	100
Grants management	40	57	59
Public information	7	15	17
Total	173	231	301

B. Average State Planning Staff

(in man-years)			
Category	FY 1969	FY 1970	FY 1971
Executive	1.0	1.0	1.0
Planning	0.3	0.7	1.3
Program	1.3	1.4	1.8
Grants management	0.8	1.0	1.1
Public information	0.1	0.3	0.3
Total	3.5	4.4	5.5

TABLE 7.—Cont'd

C. Nationwide Percent Distribution of State Planning Staff Effort

	(percent)		
Category	FY 1969	FY 1970	FY 1971
Executive	28	23	18
Planning	9	16	24
Program	37	31	33
Grants management	23	23	20
Public information	3	7	5
Total	100	100	100

Source: Unpublished data from the Administration on Aging, 1970.

Unfortunately, these data are of little value for assessing the current situation with respect to State planning in aging. To begin with there is an important distinction between funds that are *classified* as "planning funds" and funds actually *used* for planning. This distinction is reflected in Table 3 where personnel supported out of planning funds are broken down into different personnel categories, including the category of planning personnel. Thus in fiscal 1971, for example, only 17 percent of the planning personnel funds were actually expended on planning personnel.

Similarly, some of the planning funds spent on contracts (See Table 1.) were spent for purposes unrelated to planning. Officials at AoA estimate that perhaps 68 percent of such contracts might be broadly interpreted as relevant to planning. In short it is necessary to make a distinction between planning personnel, planning contracts, and reported "planning effort" or man-hours, on the one hand, and personnel, contracts, and effort supported out of planning funds on the other hand.

Even after this distinction is made, the data are not especially informative. A number of pertinent questions cannot be answered. What is the number of actual persons (as opposed to man-years), by State, engaged in planning? What are their job descriptions? What do they actually do? What are their educational and technical backgrounds? What types of planning contracts are made, and with whom? How does the work performed under these contracts fit into a total State planning effort or strategy? Without answers to questions such as these, it is impossible to make a documented assessment of the current situation in State planning in aging.

In the absence of hard data, however, spot checks within the States and the regional offices of Health, Education, and Welfare provide some picture of the status of State planning. To begin with, it seems clear that many States have difficulty expending the additional planning funds made available to them under the 1969 Amendments. In one State, for example, nearly 50 percent of the planning funds were turned over, just before the end of the fiscal year, to a citizens' commission that was preparing for the White House Conference. In effect, the 60 citizens on the Commission became "planning staff" for the State. Typically, planning funds have been used to hire all types of staff for the State agencies, including secretaries, clerks, public information specialists, community coordinators, and research analysts. And funds not spent on staff are used for contracts of all kinds.

State Units on Aging tend to report that they are engaged in the following types of planning activities:

- Meetings with officials, agencies, and departments; regional conferences;
- Demographic and other survey-type reports on particular problems of the elderly;
- Preparatory work for the White House Conference;
- Establishment of local or county commissions on the aging;
- Contracts for technical assistance from universities and other agencies;
- Work with other agencies and departments on projects of relevance to the elderly (Model Cities, etc.);

Participation on interdepartmental committees on the aged—sometimes through the Governor's office;

Training sessions on management;

Evaluation through on-site visits;

Application of PPBS and other new techniques;

Hearings by legislative committees;

Preparation of service directories and other literature.

In general, State agencies seem to feel they have had difficulty in implementing the 1969 planning amendments. They tend to report difficulties in obtaining qualified planning personnel because of low salary schedules established by their State governments, rigid State civil service requirements, and the seeming lack of appeal associated with aging as a professional field. State agency directors also cite the "low status" or "lack of clout" associated with their units within State administration and politics. (See Table 8. for the structural status of State Units on Aging within their own State governments.)

TABLE 8.—STRUCTURAL STATUS OF STATE UNITS ON AGING WITHIN THEIR OWN STATE GOVERNMENTS (AS OF JULY 9, 1970)

A. Status of State Agencies	
Independent agencies	22
Multi-functional departments	33
Total	55
B. Summary of Organizational Placement of State Units on Aging Within State Department	
First level placement (1)	Connecticut
Second level placement (17)	Alaska Arizona Colorado District of Columbia Michigan Minnesota Missouri Nevada New Jersey Ohio Oregon Puerto Rico Rhode Island South Dakota Utah Virgin Islands Wisconsin
Third level placement (9)	Delaware Florida Guam Illinois Massachusetts North Dakota Oklahoma Pennsylvania Trust Territories
Fourth level placement (3)	Kansas Maine Washington

TABLE 8.—Cont'd

C. State Units on Aging by Department Within State

Alabama	Independent		
Alaska		Health and Welfare	
Arizona	Independent		
Arkansas	Independent		
California	Independent		
Colorado		Social Services	
Connecticut		Aging	
Delaware		Community Affairs	
District of Columbia		Welfare	
Florida		Health and Rehabilitation Services	
Georgia	Independent		
Hawaii	Independent		
Idaho	Independent		
Illinois		Public Aid	
Indiana			No Plan
Iowa	Independent		
Kansas		Welfare	
Kentucky	Independent		
Louisiana	Independent		
Maine		Health and Welfare	
Maryland	Independent		
Massachusetts		Community Affairs	
Michigan		Social Services	
Minnesota		Welfare	
Mississippi	Independent		
Missouri		Community Affairs	
Montana	Independent		
Nebraska	Independent		
Nevada		Health, Welfare, and Rehabilitation	
New Hampshire	Independent		
New Jersey		Community Affairs	
New Mexico	Independent		
New York	Independent		
North Carolina	Independent		
North Dakota		Welfare	
Ohio		Mental Hygiene and Correction	
Oklahoma		Welfare	
Oregon		Human Resources	
Pennsylvania		Welfare	
Rhode Island		Community Affairs	
South Carolina	Independent		
South Dakota		Planning	
Tennessee	Independent		
Texas	Independent		
Utah		Social Services	
Vermont	Independent		
Virginia	Independent		
Washington		Public Assistance	
West Virginia	Independent		
Wisconsin		Health and Social Services	
Wyoming			No Plan
Guam		Health and Social Services	
Puerto Rico		Health and Welfare	
Virgin Islands		Welfare	
American Samoa			No Plan
Trust Territories		Community Development	

Source: Unpublished data from the Administration on Aging, 1970.

A common view among directors of State Units on Aging is that a major problem in attempting to launch effective State planning in aging has been the absence of guidelines from AoA telling them "how to undertake planning, and what its immediate objectives should be." AoA has been responsive to this view and has attempted to fill the void by developing guidelines for State planning which it issued on August 5, 1970. These new guidelines are:

The State Plan will project staffing for a three-year period and must include qualified staff to undertake these responsibilities: research, data gathering, and information dissemination; program review and evaluation; coordination with other agencies; staff training, consultation to other agencies; public information; citizen participation, volunteer, and advisory committee activities; and administrative and management work.

A Training and Manpower Development Plan will assess needs, priorities, and recommendations for staff training.

State-wide planning must include:

- (1) Special studies—issue analysis and data gathering
- (2) Program evaluation and review
- (3) Linkages with other State planning efforts and service programs that affect the elderly

The State agency will coordinate and stimulate planning efforts on behalf of all older persons.

Mechanisms will be developed to assure effective coordination of other major aging activities and programs.

Effective working relationships will be developed and maintained between the State agency and other public and private agencies dealing with programs for the aged.

A cooperative relationship will be developed with other major service delivery agencies to encourage ongoing evaluation of aging programs.

A comprehensive study of the status and needs of the older population will be completed in each State by July 1, 1971, and thereafter updated.

Consultative, technical, and information services will be provided to other organizations working with the aged.

Consultation and cooperation will be developed with other agencies and organizations.

A report on the achievements of State programs for the elderly must be completed by no later than July 1, 1971.

AoA has also laid out a long-term schedule for the development of State planning in aging, consisting of four phases:

- (1) Comprehensive data gathering—'70-'71—on the status and needs of the elderly and on State agency achievements. Two tools have been developed—social indicators and data books on the aging.

- (2) Comprehensive evaluation—'71-'72—of extent to which resources are meeting needs, use of an evaluation guide, and State-wide impact of existing resources.
- (3) Development of State plan of action—'72-'73—setting State-wide policy on goals and priorities in a plan of action to be approved by the Governor.
- (4) Implementation of a State plan of action.

At this time, most professional and lay observers of State planning in aging seem to feel that it has not progressed very far since the 1969 Amendments. More money has been spent and more people have been hired *in the name* of planning. But the planning activities and efforts undertaken have rarely been concerted toward any major action objectives. Certainly, in most States, planning activities have not been concerted toward the general, overriding purpose of State planning in aging—to exercise planning leadership by changing the policies and activities of existing State and local generic organizations so that they will do a more effective job of meeting the needs of the aged.

There are no valid scientific measures to document the extent of change in the operational patterns and policies of generic organizations. But it is evident to the most casual observer—and especially to the older persons who look to these organizations for help—that they are, if anything, less responsive to the needs of the aging than they were ten years ago. An excellent case in point, for example, is provided by the new community mental health centers which are widely known to focus their therapeutic efforts disproportionately on young persons.

AoA has recognized that most of the State Units on Aging are still functioning primarily as dispensers of Title III program grants to local organizations, and that State leadership planning has yet to develop. During this past year AoA has invested considerable effort in interpreting to the State Units the distinction between service operation and leadership planning, emphasizing the overriding importance of the latter. In addition, it has funded contracts and research grants to develop systems through which each State can have reliable data on the needs of its elderly citizens, suitable for use in formulating priorities and plans of action.

In its new four-phase schedule for the development of State planning, AoA is just beginning to come to grips with the need for power in the conduct of leadership planning. AoA's basic strategy is to provide the SUA's with sufficient, sophisticated data on needs of the aging; to be able to influence centralized State budgetary decisions, and to have the governors adopt authoritative, binding plans of action for benefiting older persons.

Whether the new data systems being developed by AoA can be implemented with sophistication, and whether they provide an adequate base for exercising power within the States, remains to be seen. As indicated in Section III above, available knowledge about the exercise of power indicates that inducement and coercion are the most generally reliable means of getting organizations to change their policies and activities. Organizations that are targets of change efforts rarely are influenced by rational persuasion, even when it is based upon the most sophisticated data and dealing with the most compelling of human needs. If State leadership planning in aging is to develop effectively, it may ultimately have to rely upon regulatory authority, funds, and broad political support. For these are the sources of power most likely to constrain and induce generic organizations to be more responsive to older Americans.

C. PLANNING BY LOCAL COMMUNITY ORGANIZATIONS AND NATIONAL VOLUNTARY ORGANIZATIONS

The call of the 1961 White House Conference for the establishment of a Council, Commission, or Committee on Aging in every local community has been rather well heeded

during the past ten years. While no one has compiled aggregate figures, observations in each of the States clearly indicate that literally hundreds of local Councils on Aging have been established throughout the nation. Some of them have been established through municipal or county auspices. Others have been established by voluntary health and welfare councils. And still scores of others have developed out of the direct efforts of aging citizens, themselves.

Progress toward the planning goals that the 1961 Conference envisioned for these organizations, however, has not been as favorable. It was hoped that these local organizations on aging could influence existing generic organizations to be more responsive to the needs of the aging and aged. But the current situation for these community councils is essentially the same as that of the mechanisms for planning in aging at the Federal and State levels. They lack sufficient power to be effective in leadership planning.

The problems of leadership planning in aging at the community level were well documented in the early 1960's by a three-year demonstration and research project on Community Planning for the Aging financed by grants from the Ford Foundation. The grants were made to public and private local Committees on Aging in communities throughout the country. These funds enabled each sponsoring committee to hire a full-time professional staff member who was expected to make use of existing community resources in an effort to develop and expand programs and services for the elderly. The concrete results of these efforts were relatively meager considering the resources and personal efforts invested. But the lessons that emerged were clear. The Committees on Aging were relatively successful when they had something to offer as an inducement to the generic organizations they were trying to influence. When all they had to offer was moral arguments and information about the needs of the aging, their efforts were almost invariably fruitless (Morris and Binstock, 1966). Similar studies in the last few years have found essentially the same principles at work.

The need for leadership planning in aging in local communities is greater than ever. Virtually every analysis of local generic organizations reveals that programs and services for the aging have the lowest, or near to the lowest, priority. One of the more recent reliable studies, for example, focused upon 24 so-called community organizations (public health departments, community agencies, urban renewal agencies, and voluntary health and welfare councils) involved in the development of Model Cities programs in six major metropolitan areas. The staff, administrators, and board members of each of these 24 organizations were asked to rank the most important target groups for improving problems in health. With virtually no exceptions, the aging were seen as the lowest priority group (U.S. Senate Special Committee on Aging, 1970). Repeated, less systematic observations by older persons and professionals in the field of aging parallel and bear out the findings of this study.

National voluntary organizations in the field of aging—the National Council of Senior Citizens (NCSC), the American Association of Retired Persons - National Retired Teachers Association (AARP-NRTA), the Gerontological Society, the American Geriatric Society, the National Council on the Aging (NCOA), and the American Association of Homes for the Aged (AAHA)—have been relatively successful in the past ten years in developing membership strength and in having some impact in the field. They have not come together in a coordinated planning body as suggested by the White House Conference of 1961, although they have held some exploratory meetings on this subject within the last year. But they have been able to have some limited effects upon public and private generic organizations.

NCSC and AARP, as mass membership organizations of several million older persons, have developed active roles in shaping major national policy debates and legislation affecting the aging. AAHA has provided important technical insights for the development of long-term care programs. The Gerontological Society, the Geriatric Society, and NCOA have: carried out important research and demonstration projects; provided informational and training services; provided expert testimony at Congressional hearings; and stimulated considerable interest in aging within generic professional organizations such as the American Psychological Association and the universities.

On occasion one or another of these organizations has attempted coordinative efforts. In the fall of 1969 NCOA convened a meeting of dozens of generic service organizations in an

attempt to stimulate their interests in the needs of the aging. In December, 1969, the Gerontological Society convened a meeting on Capitol Hill, bringing together representatives of numerous Federal agencies and national voluntary organizations, in an attempt to identify a program of priorities for research in aging. To date, efforts of this kind have been relatively unsuccessful. For the national voluntary organizations—as for AoA, State Units on Aging, and local Councils on Aging—it has been far easier to manage one's own affairs than to shape the policies and activities of others.

V. ISSUES

The foregoing sections have discussed the elements of planning, the current confusion over what planning in aging is or should be, and the present tendency to focus on one aspect of it, namely the effort to exercise leadership in getting existing generic agencies to give greater attention to the needs of older people.

Goals for planning at Federal, State, and community levels are reviewed in terms of recommendations made by the 1961 White House Conference on Aging, the Older Americans Act, and various Federal Task Forces. It is pointed out that one of the principal elements lacking has been the power to persuade or influence.

In Section IV on the Present Situation, the fractionation of planning and program responsibility at the Federal level is described, along with discussions of the nature and shortcomings of attempts to establish meaningful planning at all levels of Government.

In the present Section, the Technical Committee sets forth several issues which it believes should be resolved by participants in White House Conferences during 1971.¹ It is hoped that resolution of the issues in the form of proposals for national policy will lead, eventually, to improved planning efforts on behalf of present and future older populations.

The questions raised by the issues are stated briefly as follows:

1. How should Federal planning in aging activities be organized?
2. Similarly, how should State and local planning in aging activities be organized?
3. Is it possible to establish a relationship between planning in aging activities at the three levels of government?
4. Should planning in aging focus on influencing the use of the resources of generic agencies (e.g., health, welfare, etc.)?
5. How much of a role should older persons play in planning in aging, with respect to the role of professional planning personnel and to the role of younger and middle-aged persons?

Issue 1.

Should the departments and agencies of the Federal Government conduct their planning in aging activities independently of one another as most of them tend to do now? Or, should there be created in addition to their efforts a separate entity within the Federal Government charged with comprehensive responsibilities for planning in aging?

Before this question can be answered, several related questions need to be addressed. First, if a new entity is to be established, how much power should it be granted? Should it have the power to set goals for Federal agencies? Should it have the power to require Federal agencies to plan together? Should it have the power to speak out concerning actions of Federal agencies which are actually or potentially harmful to older persons? Should it have control over their individual planning efforts?

Second, how should it obtain the information it needs concerning the planning activities in aging of Federal agencies? Through an inter-agency committee? Through stationing staff in the offices of the heads of agencies? Through reports to its staff?

¹This Section was prepared by Byron D. Gold at the request of the Technical Committee. Mr. Gold is Director, Division of Program and Legislative Analysis, Administration on Aging, Social and Rehabilitation Service, and Director of the Secretariat for the Technical Committee on Planning. In preparing the issues and supporting discussion, Mr. Gold relied, in part, on material developed in connection with the paper, and incorporated the issues material developed by the Technical Committee

Third, how broad should its responsibilities be? Should it be responsible for evaluating the effectiveness of all Federal programs specifically aimed at meeting needs of older persons? For evaluating the impact—both good and bad—of Federal programs on the lives of the elderly? For reviewing existing and proposed legislation, budgets, operating plans, regulations, etc., for their effect on the well-being of older persons? For submitting an annual report to the President and the Congress on the status of older persons, together with legislative and administrative recommendations to improve that status? For designing plans to meet specific problems? For recommending changes in national policy with regard to the elderly?

Fourth, should its mission be confined to planning or should it also be responsible for program development? Should it, for example, be responsible only for helping to establish Federal policies on long-term care, or should it also be expected to coordinate the efforts of concerned agencies in executing these policies? If it did not perform that task, who would? The Office of Management and Budget of the White House? The President's Council on Aging?

Fifth, what would its relationship be to the President's Council on Aging, the Administration on Aging, and the many citizens' advisory committees to Federal agencies concerned with the elderly?

Arguments in Favor of Creation of a New Entity

- A. The needs of all human beings are multi-faceted. This is even more true of older persons. No one need of the elderly can be treated as something discrete, without reference to another need.

Government organization perforce reflects the multi-faceted nature of human needs; thus it, too, is multi-faceted. To be successful, any effort undertaken by government to meet the needs of older persons must recognize the interrelatedness and interdependency of a multitude of public and private programs, policies, organizations, etc. A central, highly-placed, powerful planning entity is the only way that such recognition can be achieved and maintained on a continuing basis.

- B. Inside each Federal agency, resources which can be devoted to the elderly compete against a variety of other demands. Frequently, such competition results in comparisons detrimental to the elderly. Somewhere in the Federal Government there needs to be a staff concerned solely with tallying up the net effect on the elderly of all of these separate competitions. Through such a balancing-out process, it may be possible to show an agency that while an action it proposes to take seems innocuous, when related to other actions of which it is not aware, the picture changes.
- C. Taking the Federal budget as a whole (as distinguished from each agency's budget) resources for aging compete against other national priorities. When, for example, tax laws are rewritten and one effect of such legislation is to discourage private philanthropy for the elderly, then aging can be said to have a lower priority than tax reform. Somewhere at the highest level of the Executive Branch there needs to be a staff capable of defending the share of national resources devoted to older persons and of advocating an even greater share.
- D. Some older persons are beginning to agitate for an independent agency into which all Federal programs directly intended to benefit the elderly would be placed. Many public administration theorists look askance at the idea of client-centered organization. Effective comprehensive planning in aging can stave off the pressure for such an agency.

- E. An agency not operating programs of its own could be more effective in evaluating programs of other agencies.

Arguments Against the Creation of a New Entity

- A. Centralized Federal planning in aging is not feasible. Too many Federal agencies have too much at stake to be willing to cooperate with a new planning entity. As long as they continue to have operational control over their programs, they can mitigate the benefits to be derived from comprehensive planning in any number of ways. It is simply not possible to concentrate enough power in a new entity so that it can overcome this lack of cooperation. Therefore, why make the effort and only end up increasing the confusion?
- B. Centralized planning in aging will only become a practical reality when all Federal programs which benefit older persons are reorganized into a single agency. Until then, planning in aging is nothing more than an interesting theoretical conception.
- C. Desirable as national planning in aging would be, so would national planning be for women, the Spanish-speaking, blue collar workers, etc. Are the needs of older persons so much more important than the needs of these groups that they warrant special treatment? Are their needs any more different from those of the general population than are the needs of these groups? If government responds to one group by creating a special organization, it establishes a precedent. We jeopardize the basic efficiency of government when we encumber it with new structures, no matter how needed they may appear to be. All citizens, including the elderly, want to see government made more efficient.
- D. There is a slightly different way of stating this same objection. The trend in government is toward human resources consolidation. If there is centralized planning for meeting any set of needs—those of the elderly, women, etc.—it should occur within the framework of centralized planning for human resources.

Issue 2.

Similarly, should the departments and agencies of State and local government conduct their planning in aging activities independently of one another? Or should there also be created, within each State and local government, a separate entity charged with responsibility for comprehensive planning in aging?

In general, all the arguments on both sides of Issue 1 pertain to this issue. However, there are several additional points against creating new structures at the local level which should be taken into consideration.

First, the cost of blanketing the nation with local planning entities would be great. Might not these funds be better spent for service delivery?

Second, 55 percent of the population over 65 years of age live in only 10 States. Is it realistic to create local structures so that the remaining 45 percent would be covered? (The direct implication, of course, is that meeting the needs of rural elderly would not be planned for.) You may wish to refer to Table 9 to see where older people live.

TABLE 9.—RESIDENT OLDER POPULATION, BY STATE, APRIL 1, 1970

State	Number (thousands)	Percent distribution	State	Number (thousands)	Percent distribution
Alabama	326	1.61	Nevada	31	.15
Alaska	7	.03	New Hampshire	78	.39
Arizona	161	.80	New Jersey	697	3.45
Arkansas	237	1.17	New Mexico	71	.35
California	1,801	8.91	New York	1,954	9.67
Colorado	188	.93	North Carolina	414	2.05
Connecticut	289	1.43	North Dakota	66	.33
Delaware	44	.22	Ohio	998	4.94
District of Columbia	71	.35	Oklahoma	299	1.48
Florida	986	4.88	Oregon	227	1.12
Georgia	367	1.82	Pennsylvania	1,272	6.29
Hawaii	44	.22	Rhode Island	104	.51
Idaho	68	.34	South Carolina	191	.94
Illinois	1,094	5.41	South Dakota	80	.40
Indiana	494	2.44	Tennessee	383	1.89
Iowa	350	1.73	Texas	990	4.90
Kansas	266	1.32	Utah	78	.38
Kentucky	337	1.67	Vermont	47	.24
Louisiana	307	1.52	Virginia	366	1.81
Maine	115	.57	Washington	322	1.59
Maryland	300	1.48	West Virginia	194	.96
Massachusetts	636	3.15	Wisconsin	473	2.34
Michigan	753	3.73	Wyoming	30	.15
Minnesota	409	2.02	American Samoa	1	-
Mississippi	222	1.10	Guam	1	.01
Missouri	561	2.77	Puerto Rico	153	.76
Montana	69	.34	Trust Territory	5	.02
Nebraska	184	.91	Virgin Islands	3	.01
Total: 56 States 20,213,000 = 100 percent					

Source: Advance reports and unpublished data of the Bureau of the Census.

Note: Detail may not add to total because of rounding. Percent distribution computed from unrounded data. Older population defined as persons aged 65 and over.

Third, even if we want to establish local planning structures throughout the country, is there enough qualified manpower to staff them? Unless greater resources were made available for preparing manpower than have been made available to date, it would probably not be possible to achieve blanket coverage.

Fourth, at the local level, the voluntary segment of the private sector is more active than at any other level of government. How effective could local planning be unless it was empowered with some type of control over the private sector?

Against these arguments, we need to remember that since services are delivered at the local level, since policies have their greatest impact at the local level, strong State and local planning in aging is probably more necessary than strong Federal planning. Also, it is probably worth reiterating that, if State and local planning efforts are not seen by older persons as effective, they will in all likelihood push hard for separate delivery systems.

Issue 3.

Should an attempt be made to establish a relationship between the planning activities in aging of the three levels of government? Or, is such a relationship beyond the possibility of initiation?

Since the three levels of government are already linked through programs on behalf of older persons, few would dispute the desirability of linking their planning efforts on behalf of

the elderly. Linkage of these planning efforts would immeasurably strengthen national, State and local planning in aging. It would allow for comparisons of the experiences and data of one part of the country with the experiences and data of another part. It would allow the Federal Government to systematically evaluate the impact of its actions. It would allow scarce skills to be shared on a regional basis. (One statistician, for example, working in a State agency could analyze data for a cluster of local agencies.) It would allow State and local personnel to anticipate the deployment of additional Federal resources or shifts in Federal policies. It would mean that the Federal Government would plan its strategies in aging in tandem with the strategies of State and localities. It would make possible, for example, blueprinting out most new programs years in advance, so that implications of such programs would not be discovered by States and localities after they were initiated.

The feasibility, however, of achieving such integration is highly questionable. Here are several of the problems:

- a. There is very little precedent in general for joint planning between levels of government and almost none in aging.
- b. Who would have the authority to convene the participants in the joint planning process? What if the States wanted to plan with regard to a problem on which the Federal Government did not wish to meet?
- c. Traditionally, high officials at all levels want to preserve as much secrecy as possible about their future actions. How can such secrecy be harmonized with the need for the openness essential to joint planning?
- d. Would the Federal Government have the authority to bypass uncooperative State governments to plan with interested localities?
- e. Planning personnel are human; they are loyal to the interests of their organizations. Sometimes those interests conflict with the interests of analogous organizations at different levels of government. How can joint planning take place if participants in the planning process are trying to protect their interests? Would it be possible to handle this problem by exchanging personnel between levels?
- f. How would the costs of integrating planning systems be financed?
- g. Inevitably, joint planning would result in direct or implied criticism of the actions of other levels of government. Could the process withstand the effects of such criticism?

In view of these problems, is the value of integrated planning great enough to warrant all of the energy that would be required to bring it into being?

Issue 4.

Should the primary objective of planning in aging be the design of separate systems of programs and services to meet the needs and concerns of the elderly? Or should the planning mechanisms that have been developed in communities and at the State and national levels continue their efforts to make existing programs and services more responsive to the concerns of older persons and more effective in meeting their needs?

Many programs, services, and facilities affecting or potentially of value to older persons are operated by private and public organizations attempting to meet the requirements of persons of all ages. Billions of dollars are invested and expended each year in the operations of these organizations—health agencies, hospitals, educational institutions, social service agencies, housing authorities, manpower training programs, mental health centers, transportation authorities, recreation programs, and so on. Yet, many older persons, practitioners, and scholars believe that these organizations give lower priority and are less responsive to the needs of the elderly than to the needs of other segments within the general population.

Mechanisms for planning in aging have been established in hundreds of local communities, and within the State and Federal Governments. Their primary objective has been to persuade these organizations to change their policies, priorities, and operational patterns so that they are more sensitive to and more effective in meeting the needs of older persons. To date, such mechanisms for planning have had little success in accomplishing this mission because they lack the means to influence these organizations. Noting this absence of success, many observers have suggested that, unless a means can be found to invest planning in aging with some degree of authority over the direction which programs aimed at meeting the needs of the elderly take, the mission of planning in aging should be modified.

One alternative objective for planning mechanisms would be to use their energies for the design of service systems that would be operated exclusively to meet the needs of the aging—geriatric hospitals, educational programs addressed specifically to older people, transportation services for the elderly, mental health clinics for the aging, and so on.

If adequate systems of this kind could actually be developed they would, presumably, be fully concerned with meeting the needs of the aging. They would allow older persons to receive services in the company of their peers, which many elderly find reassuring. Moreover, there are some indications that the morale of recipients of age-segregated services and privileges is higher than that of older persons who receive services as part of the general population. Perhaps, this phenomenon results from the extra attention which older participants in age-segregated programs feel they are getting from society.

Separate systems for the elderly would, however, necessitate the creation of parallel services for older and younger people, thus giving rise to some duplication of effort. Also, such systems would, under some circumstances, tend to isolate the aging from the rest of society and possibly stigmatize older persons. To develop such systems would also require a phenomenal mobilization of political power to have the necessary policies adopted and funds authorized and raised.

Issue 5.

- (a) Should planning in aging be primarily a responsibility of professional personnel and specialists in aging? Or should consumers have a majority voice in planning and evaluation facilities and programs designed to meet their needs?
- (b) Whatever voice consumers should have, should they be exclusively older persons? Or should middle-aged and young persons be included as future consumers?

Both of these issues hinge on the question: how much voice should older persons have in the planning process? At first glance there really does not seem to be much of an issue in either case. After all, who are better able than older persons to understand their own needs and the relevance of proposals for meeting them? The answer is not quite so simple as it might seem.

Examine the first issue. So that we may see both of its sides, let us assume that a community has decided to build a housing project for the elderly. Its sponsors must decide whether limited resources should be used to build complete apartments—which means that fewer older persons would be able to live in the facility—or dormitory rooms and a congregate

dining room—which means that more residents could be accommodated but that each would have less space. Who should control the decision-making concerning the project, older persons or professional planners with their presumably greater knowledge of total community needs and resources?

What are the merits of letting the planners control? A community is comprised of many different kinds of older persons whose needs greatly vary. The planner is aware of all of them, unlike the older person who assumes that most elderly see the world the way he does. The planner, based on scientific, objective studies of hundreds of older people in varied environments, probably has more knowledge than most older persons themselves of what in the long run will probably satisfy most of them. From experience he knows that although the older person may say that he will never eat in a congregate dining room, in a few months he will probably appreciate the opportunity for companionship at mealtime and, at least, the occasional freedom from having to plan, shop for, and prepare all of his own meals.

Similarly, the planner knows the range of possible services which can be designed into the facility. He can suggest that the first floor contain a senior center and he knows where to apply to get the center's staff funded. He knows the importance of leaving space for a day-care center for children to provide opportunities for employment and for frequent contacts with other age groups. He knows that the congregate dining room must be large enough to seat more than the facility's residents, so that residents can entertain guests and so that elderly nonresidents can take one of their daily meals at the facility. Often, older persons are unaware of the necessity for considering such possibilities.

The planner understands how to use data to arrive at public policy decisions. He is equipped to analyze problems and to find alternatives. Unlike the older person, he is less likely to be emotionally involved in decisions.

Even if the planner wants the elderly to participate in the planning process, how is he to find truly representative older persons? Selecting members of older persons' organizations does not assure him that the people he will plan with will closely resemble the consumers of the program for which he is planning. While it may be possible for him to locate representatives of the hidden, isolated elderly of whose existence the community is, at best, only dimly aware, such older persons often have difficulty in contributing to the planning process.

Finally, participation by older persons in planning, whatever else it accomplishes, consumes time. Both taxpayers and public officials have the obligation to ask if the benefits which accrue from such participation offset the inevitable delays in effecting improvements in the circumstances of the elderly.

What are the merits of letting older persons control? First, they have a better grasp on the reality of old age, the insights that can only come from experiencing something. Scientifically verified knowledge will never contribute as much to understanding the dimensions of a problem as living with it does.

Also, as suggested in several different sections of this paper, planning in aging is far from a mature discipline. Success in planning in aging is frequently measured in very small terms: a housing project; a meals-on-wheels project; a Foster Grandparent project. Until the track record of planners is established, the instincts, perceptions, and intuitions of older persons are as good guides as the techniques of planning.

Relying on professional planners for decision making runs counter to recent trends toward participatory democracy. The basic principle underlying these trends in education, public health, public welfare, and police protection is that those affected by a public policy decision have the right to participate or, at least, to be represented in making the decision. This principle holds true for planning in aging. (The response of a planner might be that, while teenagers are consumers of high school education, no one gives them a majority vote in planning what classes will be taught.)

Giving the elderly a majority voice in planning can assure the success of the change being planned for in two ways: because the change is likely to be more acceptable to older persons; and because a natural lobby on behalf of the change is created.

Finally, planners may be very fine people, but, for the most part, they are very fine young people. Unless they have had specialized training in aging, they are subject to the same stereotyped notions about old age which are found in all other young people. Until there are such trained personnel or until they, themselves, have experienced the processes of aging, planners should accept their proper role in life which is to execute wisely the decisions arrived at by consumers.

Now, examine the second part of Issue 5, which is equally complex. Assuming that consumers should play some role in the planning process, we also need to think about which consumers. Do we want to extend participation in the planning process to middle-aged persons, and maybe even, younger persons, or should it be the exclusive province of the elderly?

In support of including the less-than-old, we can say that it takes a long time to make a social change. For example, a change made now in the rules governing contributions to a pension plan will usually achieve its intended effect a long time from now. Because the effects of planning are so often found in the future, because planning is really nothing but an attempt to arrive at an alternative to the future which would otherwise occur, those who will be the elderly of the future have a vital share in determining the kind of circumstances that society right now is shaping for their own old age. If the participation of consumers is a good thing, even better is the participation of those consumers who will be the principle primary beneficiaries from the changes that result from planning.

Moreover, the concept of future possibilities is foreign to many older persons. The immediacy of their problems, the knowledge that their future is short, and the shackles imposed on their imaginations by limited educations which took place a long time ago—all combine to prevent them from bringing to the planning process the desire to plan, which is fundamental to effective planning. A participant in planning needs to sense the potential that the future holds for solving the problems of tomorrow's elderly. Middle-aged and younger persons are more likely than the elderly to have this sense.

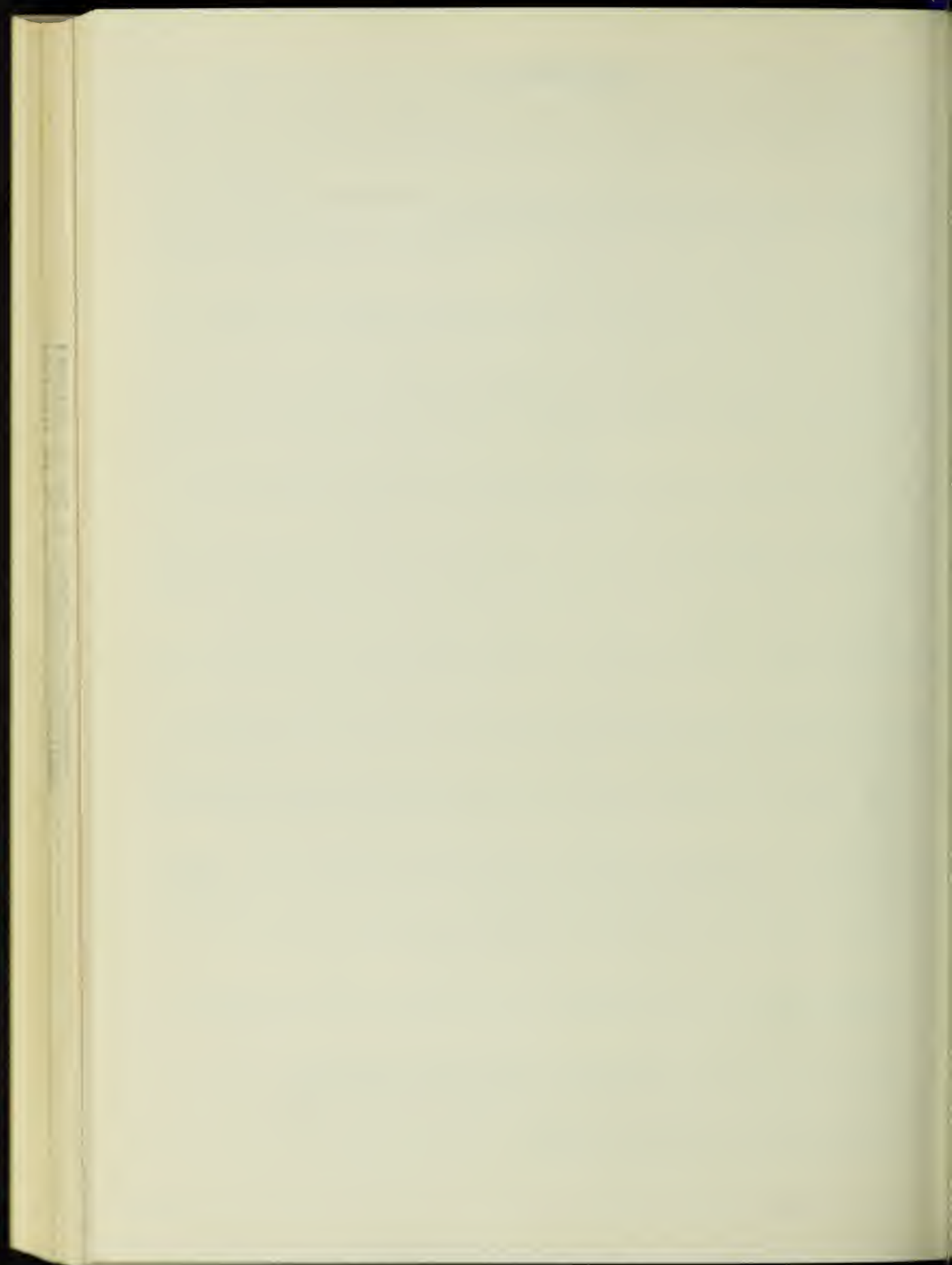
On the other hand, we need to remember the very human desire not to think about one's old age until it can no longer be avoided. Can a less-than-elderly person ever understand what it will mean to be old, and, even if he is empathetic, can he make a meaningful contribution to planning?

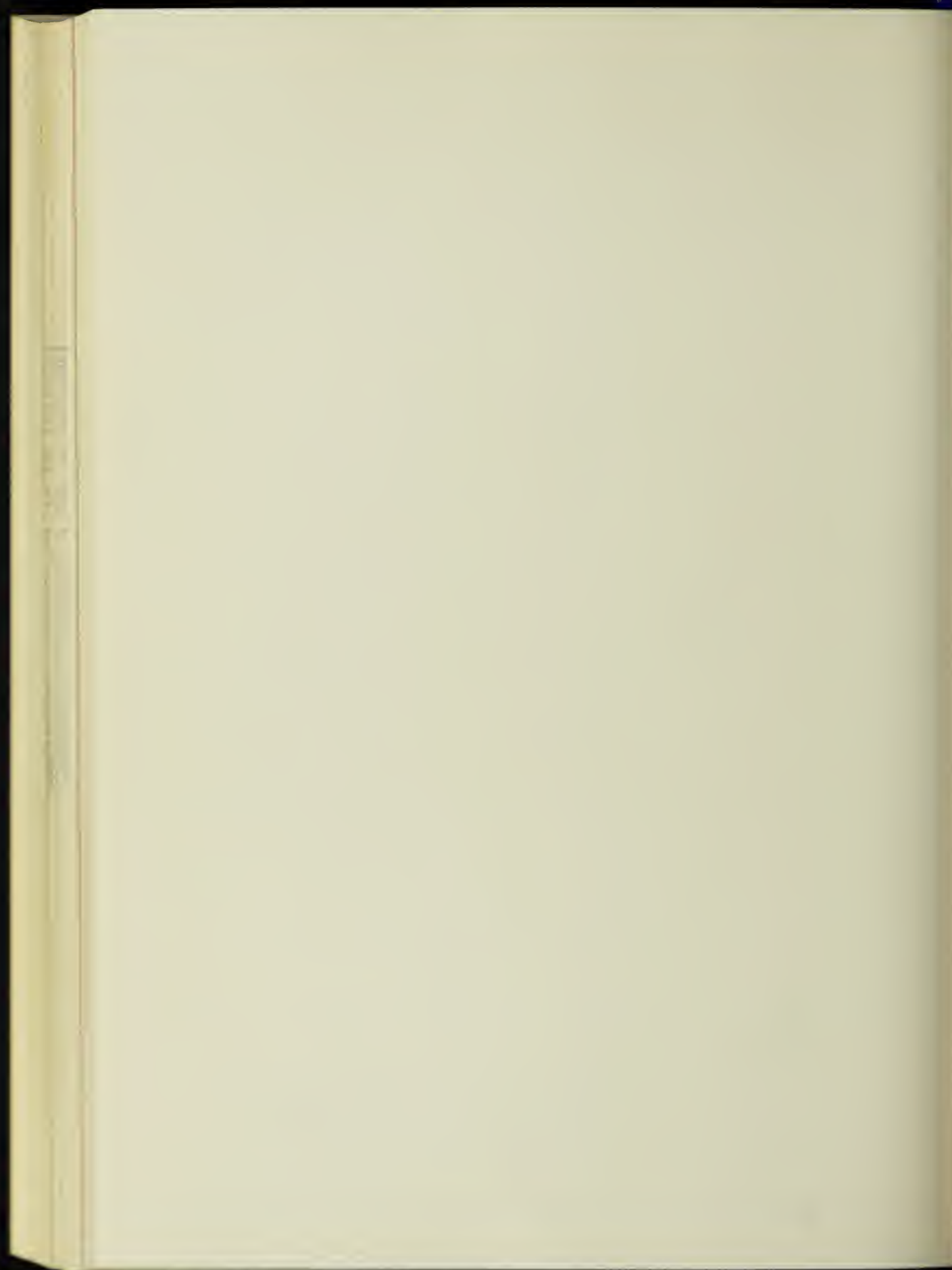
What may seem perfectly reasonable to an older person may strike a young person as patently exorbitant. In deciding whether to build a housing project as a dormitory, the older consumer may ask himself how can anyone suggest that the possessions of a lifetime the contemplation of which gives the only pleasure left—a grand piano, perhaps—be abandoned. The younger consumer, however, may wonder how any reasonable person could ask the taxpayers to subsidize space for the clear pursuit of luxury.

Also, if the perceptions of older and younger consumers are not identical, neither are the interests. Middle-aged and younger persons have their own needs which they want society to satisfy. How capable are they of forgetting that since resources are scarce, meeting the needs of older persons means that the needs of some other group cannot be met? Would not their participation in planning in aging constitute a clear conflict of interest situation?

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Physical Education

FOREWORD

This paper on Research and Demonstration provides information for the use of leaders concerned with the development of proposals and recommendations for national policy consideration and of delegates to the national White House Conference on Aging to be held in Washington, D.C., in November-December 1971.

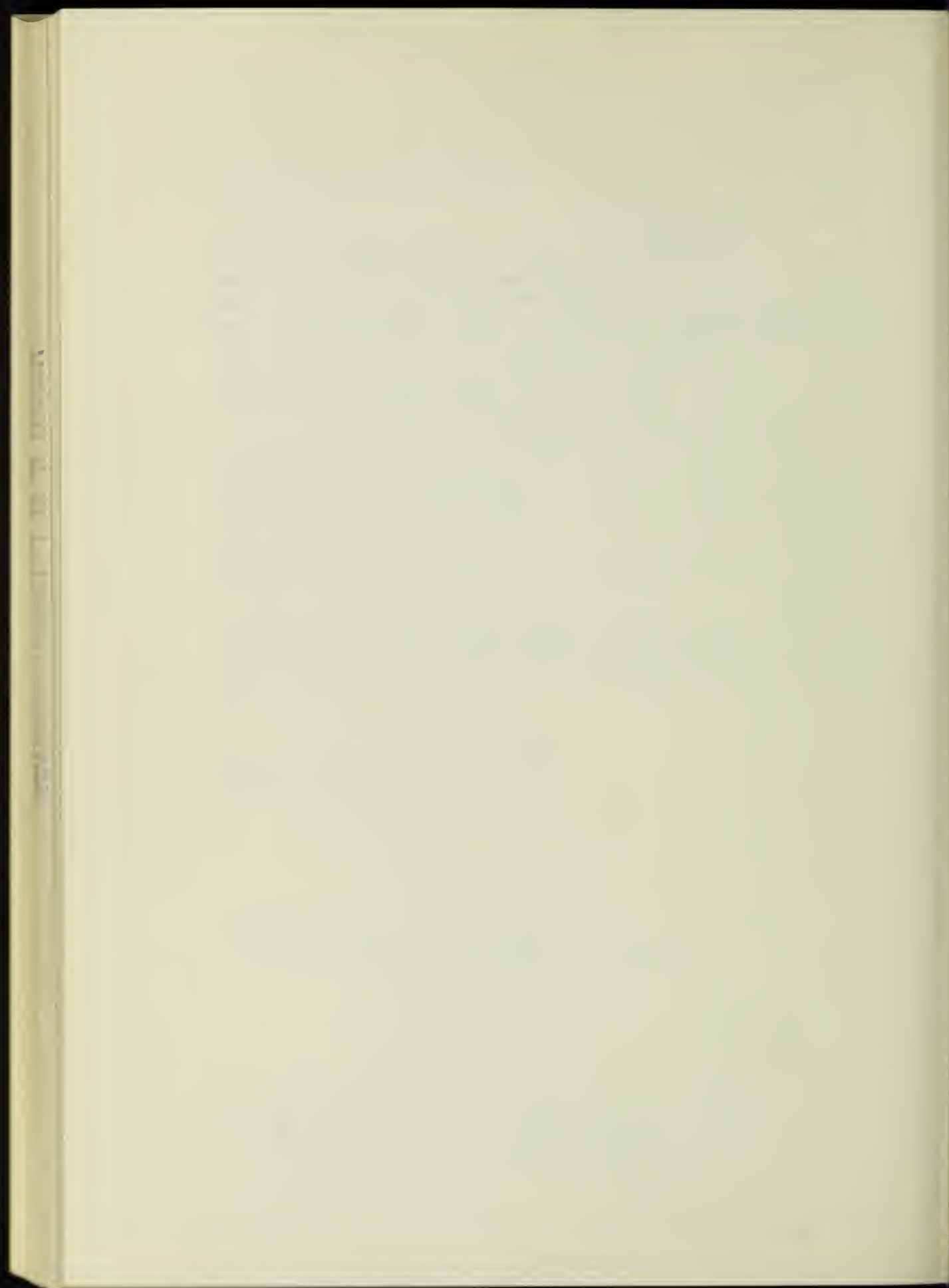
This background paper contains three parts: Part One deals with Behavioral and Social Research; Part Two with Biological and Medical Research; and Part Three discusses issues in both of these areas. Parts One and Two discuss: the need for research on aging and the aged; goals proposed by previous conferences and groups; present information on the knowledge available on the aging process; and identifiable gaps in this area. Part One of this paper was prepared for the Conference by George Maddox, Ph.D., Professor of Sociology, Duke University. Part Two was prepared by Edwin L. Bierman, M.D., Chief, Metabolic Service, Veterans Administration Hospital, Seattle, Washington.

Part Three of the paper discusses several major issues relevant to research on aging. The issues were formulated by the Technical Committee on Research and Demonstration for consideration by participants in White House Conferences on Aging at all levels and by concerned national organizations. The purpose of the issues is to focus discussion on the development of recommendations looking toward the adoption of national policies aimed at meeting the social and biological needs of the older population.

The proposals and recommendations developed in community and State White House Conferences and by national organizations will provide the grist for use by the delegates to the national Conference in their effort to formulate a National Policy for Aging.

Arthur S. Flemming
Chairman, National Advisory Committee
for the 1971 White House Conference
on Aging.

John B. Martin
Special Assistant to the President for
the Aging and Director of the 1971
White House Conference on Aging.



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PART ONE: BEHAVIORAL AND SOCIAL RESEARCH

I. INTRODUCTION—THE NEED

Support for fundamental and applied research is typically widespread in all technologically advanced societies. Experience underlies the belief that research has made and can make a significant contribution to the achievement of important social goals. In the United States, for instance, during the last two decades annual rates of research and development (R and D) expenditures have grown more than twice as fast as the Gross National Product. Allocations of three to five percent of operating budgets to fundamental and applied research is common in a wide variety of organizations. This is particularly true for both government and nongovernment organizations faced with complex problems for which routine answers do not exist and for those concerned with the efficient and effective allocation of very scarce resources.

A. THE RATIONALE FOR RESEARCH AND DEVELOPMENT

Three basic reasons for supporting fundamental and applied research are now well integrated into our common culture. First, our national experience suggests that an inquisitive, reflective orientation toward society and its organizations and to our culture and its values is desirable. Accurate perception of ourselves and our institutions, even when the information is unflattering and painful, is ultimately a sounder basis for action than ignorance. Moreover, in spite of our historic impatience with information and ideas we do not know how to apply instantly, we have appropriately retained a healthy respect for the future utility of such knowledge.

Second, the importance of higher education in complex societies is increasingly recognized. This recognition reflects more than awareness of the relationship between research and technological advancement; higher education also makes an important contribution to social mobility and effective social participation in a democratic society. Moreover, at the higher levels education and research are inevitably related. Since research is such a basic part of the educational process in a wide range of disciplines, the modern university without a fundamental commitment to research is inconceivable. This is the case because, at its best, research involves a style of thought which emphasizes the importance of reliable information as a basis for action, critical evaluation of alternative ideas, and concern about the consequences of applied knowledge.

Third, basic research is a necessary investment with potentially a high rate of return in complex societies. When resources are scarce, interest in the cost-effective ratios of alternative investments is the response of reasonable men. In the United States R and D efforts in technological matters have repeatedly proved to be sound investments. Understandably, such investments appear increasingly wise when matters vital to the health, education, and welfare of our society are under consideration. In recent years we have become more and more aware that behavioral and social scientific research can be useful in exploring the personal and social consequences of technology, in monitoring the current operation of social institutions, in anticipating social change, and in identifying those factors which are central to the amelioration of social problems.

B. RESEARCH AND DEVELOPMENT IN AGING—A SPECIAL NEED

If research and development efforts are in general a sound investment in important areas of our national life, a strong case can be made specifically for a substantial commitment to research on aging and the aged. This is particularly true for behavioral and social scientific research. As a society we have very compelling reasons to be interested. Persons 65 years of age

and older now constitute about 10 percent of our total population. This proportion has essentially doubled since the beginning of this century and currently the older population is growing at a higher rate than the population as a whole. If current death and birth rates do not change very much in the next 50 years, persons 65 years of age and older may constitute about 15 percent of the population of the United States and may number about 45 million persons. Of these, about one-third or 15 million persons would be 75 years of age or older.

We have such information because demographers and other social scientists have systematically studied our population in order to project trends. Currently population scientists are calling attention to the consequences of possible changes in birth and death rates which might dramatically alter the age composition of our population. A continued decline in birth rates and further reductions in mortality in the later years of life would increase the proportion of older people beyond the 15 percent currently projected five decades from now. Behavioral and social scientists have documented the problems of income maintenance in retirement, medical care, housing, transportation, and institutionalization already experienced by many older people in our society. Such considerations constitute clear and ample warning that research and development efforts which focus on these problems should receive high priority now.

C. THE PRIORITY OF RESEARCH AND DEVELOPMENT EFFORTS

The low priority of research and development on aging and the aged in recent decades has been well documented. *When one considers that the annual Federal expenditures for various programs related to the health and welfare of older people currently is an estimated 36 billion dollars, the investment of a fraction of 1 percent of these expenditures for research and development on aging is surprisingly low.*¹ The experience of other governmental agencies and private industry would lead us to expect an investment in R and D ten to twenty times greater. Similarly, about 25 percent of those admitted to our mental hospitals are older persons, but *only 1 percent of our expenditures for mental health research focuses on the old.* This is difficult to understand in a society which usually values sustained R and D efforts because the contribution of research to the resolution or amelioration of important problems has been repeatedly demonstrated.

The relatively low priority of research on aging and the aged is not in itself a compelling argument for an increased investment. What is important is that the current level of investment in research deprives us of information which is vital to understanding and attacking with effectiveness and efficiency problems of great importance not only to older people but also to the entire society. In the past several decades we have learned a great deal from research about aging and the aged. Some of the important findings are illustrated in the next section of this paper. But a great deal remains to be known, as will also be illustrated, and the necessary new information will accumulate very slowly, if at all, at the current level of investment in research on problems of special relevance to the elderly.

D. A FOUNDATION FOR NEW RESEARCH AND DEVELOPMENT EFFORTS

In spite of a very modest investment in research on aging and the aged during recent decades, behavioral and social scientific research and demonstrations have made important contributions to our understanding of the aging process and of the factors which facilitate successful aging. The portrait of aging and the aged produced by such research may be summarized as follows.

The old are demonstrably not a homogeneous category of persons. The fact that the old retain their individuality in the later years has important implications for planning services to meet their needs. Old people present a variety of needs which defy single, simple solutions in regard to income maintenance, health care, transportation, housing, or social service.

¹ The Federal expenditures cited here include "transfer payments." See U.S. Senate Special Committee on Aging, 1970, p.268.

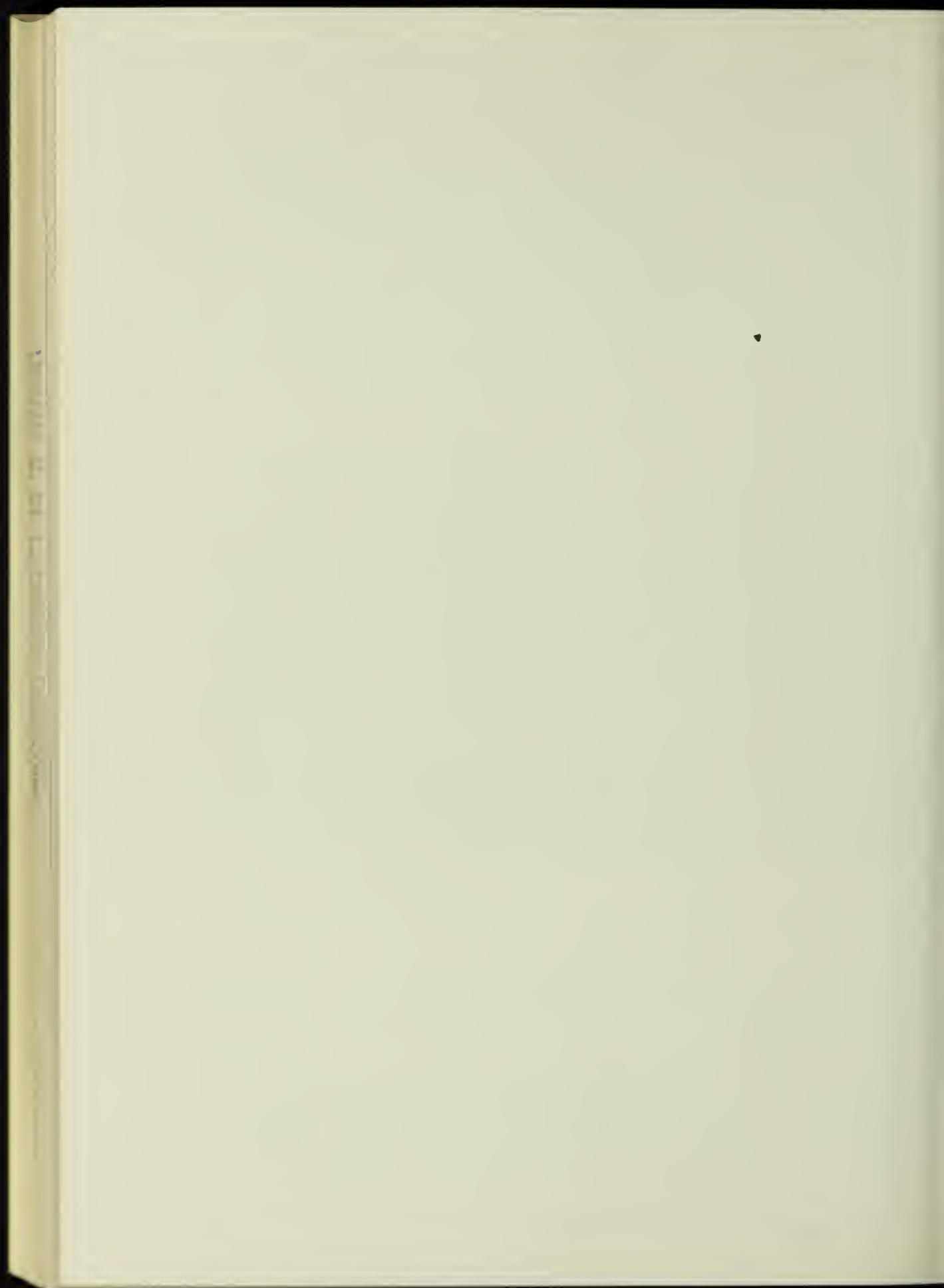
Chronological age by itself is a very poor predictor of the capabilities or needs of older people. In the typical case older people have a greater capacity for appropriate response to the environment than is usually permitted or encouraged by the environments in which they live.

Old age does continue to be associated with serious personal and social deprivation for a sizeable minority of the old in our society and with social disadvantages for most. Problems of health and income maintenance are common in the later years of life. Behavioral and social scientists, however, have demonstrated that the totally bleak picture of older people as inevitably alone, lonely, disabled, impoverished, and incompetent is a misleading caricature of the aged in the United States. These scientists also have called attention to the changing experiences of currently middle-aged individuals who will constitute the older population of the next decades; the older persons of future decades will present different needs and have different expectations. Each cohort of individuals which reaches age 65 has completed, on the average, a larger number of years in school than the last. Each cohort will have experienced a higher level of living during the adult years than the last. Such facts call to our attention that planning to meet the needs of older people in the early decades of the next century must be based on projections of their characteristics then rather than on the characteristics of older people now. The increasing number of the very old, for example persons over 75 years of age, must also be taken into consideration.

E. NATIONAL SCIENCE POLICY AND RESEARCH AND DEVELOPMENT IN AGING

Our national science policy has given behavioral and social scientific research and development efforts a low priority and the effects of that policy are evident, particularly in regard to aging. Scarce funds have been widely dispersed with the result that adequate numbers of scientists have not been able to pursue important issues in depth. In the Gerontological Society, the principal organization for behavioral and social scientists interested in aging, there are only about two hundred Fellows (senior research investigators) in the sections for psychologists, sociologists, and other social scientists. (Altogether these sections have approximately 1,500 hundred members, many of whom are not primarily engaged in research.) Necessary replicative research consequently has been rare; available evidence has been inadequately synthesized and evaluated too infrequently and too slowly. Organizational frameworks within which basic and applied research have been related efficiently and effectively have not emerged.

An adequate national science policy which will encourage and sustain research and development efforts on aging in the behavioral and social sciences is overdue. Yet a policy which would insure these efforts is neither apparent nor in prospect. The basic proposition of this paper is that the development of an adequate policy is both necessary and prudent. The justification of this claim warrants careful consideration.



II. LONG-RANGE GOALS

The absence of an explicit, defensible national policy on research and development in aging is well documented. Convincing evidence for this conclusion has been presented repeatedly for a decade by many competent witnesses appearing before the U.S. Senate Special Committee on Aging. The extremely inadequate investment in behavioral and social scientific research has been emphasized repeatedly. The organizational structure for the development and implementation of an adequate scientific policy has been as inadequate as the financial support.

A. EMERGING CONSENSUS ABOUT GOALS

Significantly, the first of twenty-four recommendations of the Presidential Task Force on the Aging, (*Toward a Brighter Future For The Elderly*, 1970), is that the President establish an Office on Aging within his Executive Office. The responsibilities of this new office should include, according to this report, the development of national policy on aging; recommendation of research priorities; and the planning, oversight, coordination, and evaluation of Federal activities on aging. This strong recommendation of the Task Force underscores the current absence of an adequate policy for research in aging and of an organizational framework within which to develop and implement such a policy. We know that Federal expenditures on programs of special relevance for the elderly are estimated to be 36 billion dollars annually and that overseeing these expenditures is the responsibility of numerous government agencies which have no systematic way to coordinate and evaluate their programs. Consequently, we currently have no basis for confidence that these expenditures meet the needs of older people efficiently and effectively.

Representatives of the Gerontological Society have also expressed their concern about the absence of national policy on aging which gives adequate attention to research. They have recommended specifically that a national commitment to research and development in aging would be reflected appropriately in the creation of a National Institute of Gerontology or a Center for Research and Training in Gerontology within the National Institute of Child Health and Human Development (Gerontological Society, 1970). The creation of a special organization would, in their view, enhance the visibility and status of research and demonstration efforts in aging; the special organization they recommend involves an increase in research and development funds allocated to aging. Absence of a coherent science policy with reference to aging has encouraged the dispersion of limited R and D funds over a wide range of important issues at the expense of pursuing particular issues in depth and over time. In the absence of intensive research, findings necessarily remain tentative and the confirmation of findings through replicative research by several investigators continues to be the exception rather than the rule.

The problems which plague research and development in aging generally are especially acute for the behavioral and social sciences. Consistently an estimated 75 to 80 percent of available research and demonstration dollars have been allocated to work on biomedical problems. No useful purpose is served by quarreling with the accuracy of this estimate or the policy underlying such an allocation of resources. Surely the biomedical sciences need substantial support in the search for knowledge which may reduce disability in the later years and increase the number of effective years in the life span. But the wisdom of funding research which has the potential of increasing the life span without at the same time making an appropriate investment in knowledge about income maintenance, about effective use of leisure time, about factors which contribute to mental health, or about the social integration of the old is patently questionable. The prospect of longer life would surely be much more attractive if there were a reasonable prospect of adequate income, a viable health delivery system, and model cities which indeed fulfill our current hopes and reasonable expectations.

Increasingly, advisory groups within the Gerontological Society and the Administration on Aging have suggested some priorities in behavioral and social scientific research and

development within aging. The Administration on Aging has given priority in 1970, for instance, to research and demonstration efforts in the areas of nutrition, transportation, and the organization of social services for the old. It has recommended that in 1971 priority be given to research on social participation and volunteer roles, environmental effects in behavior, the development of social indicators, and the utilization of scientific knowledge in the creation and implementation of policy. Recommendations of the Gerontological Society stress particularly the need for research on mental health in the later years. These recommendations leave unanswered the difficult task of establishing specific priorities. Yet, if greater focus in depth on selected issues is in fact wise, the exploration of consensus among competent producers and consumers of knowledge about aging provides a useful point of departure. The procedure for identifying consensus about priorities is important, however. A systematic procedure for involving a wide range of knowledgeable persons in the advisory process is necessary if arbitrariness is to be avoided in the establishment of priorities.

B. THE ROLE OF THE UNIVERSITIES

The future role of the universities in research and development in aging requires careful review. Insofar as research and training are intimately related in universities, national policy on R and D in aging would presumably include a continuing commitment to support university based programs. However, universities — organized as they are by discrete academic disciplines and steeped in traditions which have given higher status to basic than to applied research — have not always adapted well to the growing demand for the mission-oriented research designed specifically to propose and evaluate alternative solutions to contemporary social problems. A possible solution to this inadequacy, a recent report of the National Science Foundation argues, is the creation of special mission-oriented institutes which would bring together in new settings the range of professional persons necessary to attack particular problems. The proposed institutes not only would be multi-disciplinary but also would be the training ground for professionals with new applied rather than historic research degrees.

The effectiveness and efficiency of special purpose, problem-oriented institutes should certainly be carefully considered and their usefulness in dealing with problems of the elderly assessed. However, such experimentation should not be at the expense of already inadequate support for research on aging in the universities. Reduced support for university-based research would jeopardize not only the work of the already limited number of senior investigators but also would insure that needed additional investigators and new behavioral and social scientific research will not develop. Additionally, the reduction of research on aging in universities would certainly affect adversely the training of a wide range of personnel who plan careers of service to the elderly.

C. TOWARD A SOCIAL REPORT ON AGING AND THE AGED

Discussion of the feasibility and desirability of regular comprehensive reports on the state of the society has recently been stimulated by the publication of *Toward a Social Report* by the U.S. Department of Health, Education, and Welfare (1969). Economists have demonstrated the usefulness of their social scientific skills in monitoring the state of the nation's economy. The possibility of mobilizing and applying similar skills to other aspects of social life has understandably been considered. The Social Security Administration and the National Center for Health Statistics have for more than a decade collected data demonstrably useful as indicators of the health and economic welfare of the American people, and, in the process, of the nation's older people.

An attempt to develop a comprehensive annual social report on the aged in our society would surely be useful, for instance, for those concerned about the health and welfare of the old.² But this exercise would be more generally useful if an annual review of the circumstances

²An initial effort has been completed recently by the American Rehabilitation Foundation (Institute for Interdisciplinary Studies, 1970)

of the old provided indicators of the operation of societal institutions. Problems commonly associated with old age—income maintenance, adequacy of health service, housing, retirement, leisure time — are societal problems which are to be explained less by chronological age than by the operation of our institutions. For this reason an annual report on the health and welfare of all our people, not just elderly people, is desirable. Insofar as this is true, the health and welfare of older persons would provide useful indicators of the effectiveness within which health and welfare organizations are operating.

D. MAKING KNOWLEDGE AVAILABLE

Additional research and development efforts in aging must be accompanied by the creation of improved procedures for synthesizing, retrieving, and disseminating those efforts. The dispersion of R and D efforts noted previously has made the accumulation of knowledge as difficult as it has made the synthesis of such knowledge vital. Fortunately, both the National Institute of Child Health and Human Development and the Administration on Aging have recognized this particularly important requirement for the development and application of behavioral and social scientific knowledge about aging and the aged and have attempted to deal with this problem. A complete bibliography of the literature on aging is maintained and an experimental journal reporting abstracts of this literature has been developed (U.S. Public Health Service, *Adult Development And Aging Abstracts*). An occasional conference brings together research investigators and persons interested in the organization and delivery of services to restate the problem of poor communication between the producers and consumers of knowledge. Beyond this, effective procedures for improving the utilization of existing knowledge remain largely a matter of conjecture. At least two factors contribute to this unsatisfactory situation. First, we have not treated the transfer of knowledge from producer to consumer as a research problem warranting systematic, sustained investigation. Information on this problem has remained largely anecdotal. Second, we tend to underestimate the gap between knowledge, even when it is reliable, and the conversion of knowledge into specific policies and action programs. This translation is complicated further when, as is the case in research on aging, scarcity of research personnel and research support makes replicated knowledge the exception rather than the rule. This is not to say that we do not know a great deal about aging and the aged. We know a great deal that was not known two decades ago. But the absence of replication results in an unfortunate tentativeness about our knowledge which undermines confident and vigorous application. Thus, much remains to be done before the producers and consumers of scientific knowledge have at their disposal the information they require.

E. RESEARCH AND DEVELOPMENT IN AGING: PARTICULAR CASE OF A COMMON PROBLEM

The decision to invest in research and development is very difficult as a result of resource scarcity. Precisely those factors which make R and D efforts most necessary — a choice among alternatives in complex situations and with scarcity of resources — make the initiation and maintenance of such efforts difficult. But the American experience with R and D suggests the wisdom of investment in the production of reliable information about the state of the social system and the nature of its operation. The increasing number of the old and the magnitude of the social commitment to their well-being requires a new appraisal of the priority of research and development in aging.

Given the action already taken, the basic outline of a national policy for R and D in aging is now apparent. This outline includes a coordinating agency at the highest level of Federal Government; a distinct center or institute for R and D in aging within the National Institutes of Health; adequate support of university-based research on aging; experimental mission-oriented institutes on aging in various regions of the country; and intensification of efforts to summarize, synthesize, and disseminate accumulated scientific knowledge about

behavioral and social aspects of aging and the aged. The foundation for these needed developments has already been laid.

III. KNOWLEDGE AVAILABLE

The production of reliable and useful behavioral and social scientific knowledge about human aging and the aged has been substantial in recent years and has laid the foundation for future R and D efforts.³ Three volumes which critically viewed knowledge in this area were available at the beginning of the past decade.

A. LANDMARKS IN RESEARCH

The Handbook of Aging and the Individual (Birren, 1959) became the foundation on which subsequent psychological research on development in the later years of life was built. *The Handbook of Social Gerontology* (Tibbitts, 1960) and *Aging in Western Societies* (Burgess, 1960) have been especially useful to sociologists, economists, political scientists, and anthropologists.

These volumes are surely landmarks in gerontological research. But they are also notable for another reason; their appearance illustrates the productive cooperation of the Federal government, professional societies, and universities in the advancement of knowledge about aging and the aged. The National Institutes of Health provided both financial support and personnel to develop these volumes. The Gerontological Society and the Division of Maturity and Old Age of the American Psychological Association provided the context for mobilizing professional persons representing many different universities and many different scientific disciplines.

The Gerontological Society has contributed to the advancement of behavioral and social scientific knowledge about aging and the aged in a number of ways. Its official publications, the *Journal of Gerontology* and *The Gerontologist*, regularly report research on social and psychological aspects of aging. The former publication continues to carry in each issue a cumulative bibliography entitled "Current Publications in Gerontology and Geriatrics."

As cited above, the Adult Development and Aging Branch, National Institute of Child Health and Human Development, has developed an abstract journal, *Adult Development and Aging Abstract*. The Social Security Administration has also continued to support systematic surveys of older people; its report *The Aged Population of the United States: The 1963 Social Security Survey of the Aged* (Epstein and Murrar, 1967) is a significant contribution to our understanding of the economic and social well-being of elderly Americans. The Administration on Aging and a special committee of the Gerontological Society have cooperated to produce a report which is accurately described by its title, *The Status of Research in Applied Social Gerontology* (Gerontological Society, 1969). This report is an appropriate supplement to the growing number of reviews of basic research on aging and the aged.

The notable reviews of gerontological research which marked the beginning of this past decade have been matched by three recent volumes developed under the direction of Matilda White Riley and supported by the Russell Sage Foundation. *Aging and Society: An Inventory of Research Findings* (Riley and Foner, 1968) selects, condenses, and organizes an enormous body of behavioral and social scientific research on human beings in their middle and later years. A second volume, *Aging and the Professions* (Riley, Riley, and Johnson, 1969) interprets the findings of the inventory for the several fields concerned with the well-being of older people and with the prevention and treatment of problems associated with aging. And a companion volume, *A Sociology of Age Stratification* (Riley, Johnson, and Foner, 1970) constitutes an integrated effort to deal with age as a crucial variable in understanding the older individual and society in which he lives.

These references to sources of behavioral and social scientific knowledge about aging and the aged are not exhaustive. But they do illustrate the range, variety, quantity, and

³Citations for information presented in this section are generally omitted. For more complete information on the topics discussed below, see the various background papers on specialized subjects—especially the Background Papers on the "Health," "Economics," "Retirement," and "Retirement Roles and Activities" needs of the elderly. Each of these papers contains specific citations for knowledge available. (1971 White House Conference on Aging).

quality, of information available at the beginning of this decade. Although the extensive information on the characteristics and situation of older people and the nature of the society within which they live is difficult to summarize briefly, selected highlights of this information can be reviewed.

B. ILLUSTRATIVE RESEARCH FINDINGS

More recent and more adequate research evidence has required a drastic revision of prior professional characterizations of the aged population — typically pictured as uniformly poor, disabled, isolated, and depressed. Current information about older people in our society demonstrates that our earlier picture was a caricature. *The elderly are not homogeneous. Most elderly persons in the United States live competently in communities and typically report a general sense of well-being.* Less than 5 percent of them are institutionalized.

This more positive image of the elderly, however, does not deny that old age is associated with disadvantage. Many old persons are demonstrably disadvantaged economically in our society, and the aged have a higher incidence of disabling illnesses. The old are also disproportionately represented among those institutionalized in state mental hospitals.

1. Intellectual Capacity

We have new knowledge about the complex interaction of biological, psychological, and social factors in the process of aging. *We now know, for example, how difficult it is to disentangle the effects of intrinsic biological aging or illness from the impact of social experiences and opportunities.* The distinction is an important one. Psychologists have convincingly demonstrated that disabling losses of intellectual capacity which are imputed to be common among the old are not the inevitable fate of physically healthy older persons. Older persons retain a capacity for learning which they demonstrate under conditions which do not stress speed of response or arouse undue anxiety. Moreover, institutionalized older persons without severe organic brain damage can and do respond positively to enriched opportunities in environment. Similarly, industrial gerontologists have consistently demonstrated that older workers can perform common tasks at work much better than popular stereotypes would suggest.

Investigations into the basic processes of learning and memory have provided important insights into the nature of such learning deficits as exist in older age. The role of the autonomic nervous system as it affects the responses of old people in a variety of settings is being explored. And there are other data indicating that *by modifying the situation in which older persons learn, quite significant improvements can be made in their performance.*

Our sensory apparatus and perceptive capacities change with increasing age. Visual, auditory, and tactual changes are being studied but more work is required in these areas. Hearing loss appears to be of particular importance. Hearing does appear to result in quite insidious personality and interpersonal change, partly perhaps because such loss is not recognized by the person suffering from the deficit. Although the potentially valuable effects on behavior of restoring hearing have not been adequately studied, this is a fertile area for applied investigation.

Research on the pattern of psychomotor reactivity also has yielded valuable information about the behavior of older persons. Simple and complex reaction time patterns, as defined in basic psychological studies, provide insights not only into psychomotor abilities and performance but also into the pattern of withholding or performing. Understanding why individuals without psychomotor impairment fail to respond appropriately to environmental stimuli is important if we are to understand the adaptation of older persons in a variety of settings. Many such basic studies could yield further valuable insights into human motivation as well as the nature of changes in abilities and potential; these insights could in turn be used to aid older people increase their skills in adaptation to personal and social change.

Recent research identifying environmental factors which facilitate or impede appropriate response has opened a fertile but relatively uncharted area. Studies of the arrangement of physical space; institutional structure, population characteristics and administration; and the design of rooms, buildings, and communities have identified and delineated a host of factors which affect behavior and adaptation. Yet our scientific understanding of these phenomena are quite limited. Current information shows great promise in helping us learn about how physical arrangements stimulate or inhibit interaction among individuals.

Research has also begun to provide potentially significant data on the relationship between cardiovascular state and cognitive capacity. Disease states, particularly hypertension, are known to be implicated in the intellectual decline of older persons.

2. Retirement

Although many older workers are physically and psychologically capable of productive employment beyond age 65, retirement is the experience of most older persons at or before this age. In recent years a trend toward *early* retirement from work has been observed among workers who expect their retirement income to be adequate. Consequently, compulsory retirement between ages 65 and 70 for most and voluntary early retirement for rising numbers—combined with increasingly delayed entry into work force of young persons—have produced a progressively shorter average work life. At the present time a male retiring at age 65 can expect about 13 years in retirement, and the number of years in retirement can be expected to increase in the future. This prospect for a growing retirement period will probably make it economically harder to provide adequate retirement incomes in the future. A substantial number of retired older persons live in poverty or near poverty. Moreover, the exploration of effective ways to insure adequate social integration of the retired has just begun.

3. Health and Economic Status

Research on retirement and the retired has focused attention on the health and economic status of older people. Poor health is a major reason for retirement; an estimated one-half of the persons who retire would be unable to work even if there were an opportunity for employment.

In the general population seven out of ten persons age 45 through 64 report some chronic health condition, but a majority of persons 65 years of age and older report at least one chronic health problem and a minority of these indicate some limitation of activity.

As a result of declining health, older people are twice as likely as younger ones to be physically disabled and to require hospitalization; once hospitalized, they tend to remain over twice as long. The cost of health care for older persons, consequently, is over twice that of the younger population. Thus, poor health has the effect of increasing medical cost, reinforcing the need to retire, and in turn reducing income. This is the situation which Medicare was intended to alleviate at least in part. However, as an example, in its first fiscal year (1967) Medicare met only 35 percent of all health care expenditures, which averaged \$486 per aged person in that year.

The general economic situation of the aged is now well documented. Although some improvement in the economic welfare of older people has been registered in recent decades, in the late 1960's more than half the couples with an aged head-of-household had less than the "moderate but adequate" income of \$3,900 for retired couples (a measure developed by the U.S. Bureau of Labor Statistics). At least three out of ten older Americans live in poverty.

Analysis of trends in the income of older persons indicates that their relative deprivation vis-a-vis younger persons is not a transitional problem. Median income of families with an aged head-of-household was 51 percent of that for younger families in 1961 and decreased to 46 percent in 1967. If present trends continue, a majority of the older population

will have an income which will be below any reasonable level of adequacy. The economic plight of older persons in minority groups is worse than the population as a whole.

4. Social Integration

Despite the problems of income and health which are common among the old, most of them remain effectively integrated in the communities in which they live. Sociological research has clearly demonstrated that older people and their children typically maintain contact with each other and engage in a substantial exchange of goods and services. The preference of both parents and their married children for separate households has not ordinarily led to the total isolation of older parents and their children.

Only a small minority of the elderly in the United States are institutionalized. The typical older person living in a community, while he decreases his involvement in social life as he grows older, remains socially active in a wide variety of roles. In old age as in the middle years individuals exhibit different levels of social involvement. But in general a relatively high level of involvement predicts a sense of personal and social well-being among older people. Sociological research increasingly suggests that various styles of life can be equally successful if by success is meant the effective meshing of personal needs and social expectations.

5. Political Participation

Political scientists have found that age has rarely been a salient factor in explaining political behavior in the United States. Research has not conclusively demonstrated that older people inevitably become more conservative as they age. When generation and education factors are taken into consideration, older people are as active and as diverse in their political attitudes and behavior as younger ones. While older persons are as inclined as others to vote their personal interests, older persons have shown relatively little inclination in recent decades to develop political movements in which their self-interest is an initial issue. The possibility that the increasing number and visibility of the old, their unmet needs for services, and the worsening of their relative economic position will lead to political conflict in which age is a salient characteristic is now being seriously discussed by research scientists for the first time in several decades.

6. Comparative Studies

Social anthropologists and sociologists have now compared aging and the aged in various national and cultural settings. Their findings illustrate many similarities among older people in western industrial societies. Relatively high levels of social involvement typically predict a sense of well-being among the old wherever they are found. But comparative research has also demonstrated that in societies which value the social contribution of the old and provide opportunities for their social involvement, old people tend to remain active. Anthropologists and sociologists have increasingly used ethnic groups within the United States for comparative research on the effects of different value systems and kinship patterns on the lives of older persons.

7. Population Studies

The number of older people in the United States, demographers have found, continues to grow faster than the population as a whole. Until recently it was estimated that at the present rate of growth, the older population would number about 28 million persons by the end of this century and would constitute about 11 percent of the total population. *Revised estimates of population composition which takes into account a decreasing birth rate suggest that persons 65 years of age and older may constitute 15 percent of the total population early in the next century* (U.S. Bureau of Census, 1970). This change in proportion would occur

even in the absence of substantial changes in life expectancy *at birth*, which in 1965 was 70.2 years for the total population. For instance, 1965 life expectancy for white males at birth was 67.7 years and 74.7 for white females; the comparable life expectancies for non-whites was 61.1 and 67.4 years.

For males who reach their sixty-fifth year, the expected thirteen remaining years of life have not changed dramatically since the beginning of this century; there has been an improvement of less than two years. For older females the improvement has been slightly better; at age 65, sixteen additional years of life are expected, an improvement of almost four years in this century. This greater increase for females has tended to exaggerate the ratio of older females to males which is already 129 to 100 and which is projected to be 143 to 100 in the near future.

The dependency ratio is used by demographers to express the relationship between the number of adults age 15 through 65 who are presumably productive and the presumably dependent young and old. This ratio is considerably higher in the United States (67.8 percent) than in western European countries, where ratios typically range between 50-55 percent. However, in the United States the young contribute disproportionately to this ratio; for the old alone the ratio is lower (15.7 percent) than in most European countries by several percentage points.

The older population of the United States, thus, currently exhibit growth characteristics similar to those observed in western countries. Only a radical and currently unexpected change in mortality rates in the later years of life would change this growth pattern significantly. Demographers, however, have begun to speculate about the effects of substantial changes in mortality rates on population composition. Reduction in mortality currently attributable to major cardiovascular-renal disease by 50 percent is estimated to have *the potential* for increasing life expectancy by more than three additional years for persons 65 years of age. The combined effect of similar reductions in most major diseases on life expectation at age 65 would, of course, be much greater. If major advances in control of intrinsic aging factors were also achieved, increases in life expectancy in the later years of up to 25 years have been estimated (Metropolitan Life Insurance Company, 1968). In this case the dependency ratio of the old (as currently defined) to the productive population would increase appreciably; the proportion of the dependent population would increase appreciably; and the proportion of the population 65 and over might rise to 25 percent. While at this point substantial changes in life expectancy in the later years are not expected in the near future, the possibility of such changes cannot be discounted.

C. APPLICATIONS AND DEMONSTRATIONS

These illustrations of basic behavioral and social scientific research suggest some of the information we have about the state of the old and the process of aging in our society. These illustrations also suggest some important information about the nature of our society and how it operates. Information about social structure and processes is necessary if social problems are to be anticipated, understood, and effectively resolved.

Consider, for example, the economic plight of a substantial number of retired persons and the evidence that their relative economic position is worsening. Only a minority of persons over age 65 remain in the workforce. This fact is explained in large part by increasing personal problems in the later years and by policies which encourage or require retirement at age 65. The demonstrated capacity of many older workers to continue work often seems irrelevant in a society with a high rate of unemployment.

Social Security payments, which are an important part of retirement income for most retired workers, have responded very sluggishly to wage and price increases in the economy; consequently, the economic situation of retired persons who depend primarily on Social Security is adversely affected by inflation in the short run. Significant increases in Social Security payments will be required to prevent the relative economic position of the old from deteriorating even further in this decade. This is not a problem for this generation of older

persons alone. The incomes of persons retiring later in this decade may become even more inadequate (in a relative sense) without major changes in private pension and/or Social Security legislation.

Or consider another illustration. Providing adequate medical care for older persons at tolerable cost calls attention not so much to the medical needs of the old as to basic problems in the organization and financing of medical care generally. The medical needs of older persons do not explain the current crisis in medical care; their situation only illustrates the crisis.

Consider another illustration. Older persons must deal with increasing amounts of leisure and are best able to adopt to changing social demands if they exhibit role flexibility. But the old live in a society that concentrates leisure at the beginning and end of the work life, provides minimum opportunity to prepare for years of leisure or to develop the knowledge, skills, and attitudes which would encourage and give substance to flexibility in response to changing demands. Our societal values emphasize productivity and tend to associate productivity with youthfulness. On both counts the old are disadvantaged.

The current problems of older persons are a commentary on the operation of our institutions and the consequences of our values. These problems are also a prophecy about the probable experiences of contemporary adults who in future decades will themselves be old. *When we as a society invest in research and development to discover how to improve the quality of life for older people, we are in fact investing in the search for information which will improve the lives of people of all ages.*

The ultimate justification of basic research in aging is that it leads to the development of effective and efficient ways of achieving national goals for all members of our society. The old provide a special case of a general social concern. Basic research concentrates on an accurate description of aging and the aged and on the identification of factors which explain the observed situation. Basic research therefore, not only identifies desirable and undesirable states of affairs but also suggests appropriate strategies of intervention when change is desired.

Our Social Security system illustrates an application of basic research on income distribution and maintenance to the problems of income maintenance among the elderly. Continuous monitoring of the consequences of various income policies has provided a sound basis for recommending appropriate changes in benefits. Similarly, Medicare and Medicaid can be viewed as demonstration projects to explore effective ways to deal with the health needs of the elderly. We now know that these well-intended programs have been inefficient and only partially effective.

The conversion of research into policy and of policy into action that has desired effects is complex. Neither Social Security nor Medicare has been an unqualified success. But one can agree that these demonstrations do permit the identification of the consequences which follow from certain policy decisions and do provide evidence for consideration in the reformulation and implementation of policy. At the local level a variety of demonstration projects, have attempted to test the consequences of different ways of improving the social integration and well-being of the elderly. The Administration on Aging, for example, has recently supported projects to demonstrate the positive effects of reduced fares for older persons on public transportation. In general, however, demonstration projects in which careful evaluation of effectiveness is an integral part of the overall design are exceptions rather than the rule in governmental programs. The report, *The Status of Research in Applied Social Gerontology*—which was produced by a special committee of the Gerontological Society and financed by the Administration on Aging—reviews some of the future needs for demonstration projects in programs designed to serve the elderly and documents various applications of research findings to problems of employment, health care, housing, and social services for the elderly.

In summary, basic research in behavioral and social scientific aspects of aging has developed rapidly in the past decade. What we have learned from this research has been adequately documented. But development of applied research has proceeded more slowly. Experience in applications of research findings is accumulating. Moreover, the *need for* as well as the *impediments to* successful applications are better understood.

IV. THE PRESENT SITUATION

While research and development in the behavioral and social sciences advanced our knowledge of aging and the aged considerably over the past decade, these efforts have been deficient in several respects. Scarce R and D resources have been widely and therefore thinly dispersed. The expected correlates of this strategy are observed: adequate professional man power for R and D in aging has not been developed and important problems in fundamental and applied research either have not been pursued or have not been pursued in depth. These deficiencies have inhibited, in turn, an adequate synthesis of the growing amount of diverse information about aging and the aged already being produced. In addition, the deficiencies have inhibited translation of this information effectively in ways that are useful in the development and implementation of social policy.

A. THE NEED FOR AN EXPLICIT RESEARCH AND DEVELOPMENT POLICY IN AGING

The inadequacies of current R and D efforts can be traced in large part to insufficient financial support over a long period of time. But money alone will not solve the identifiable problems. The development of an explicit R and D policy on aging is equally important. The Special Senate Committee on Aging has for a decade repeatedly stressed this point. There is no central agency in the Federal Government responsible for development of R and D policy in aging. The now defunct President's Council on Aging was created to keep various government agencies with interests in aging informed about the scope of Federal activities, but this Council never attempted to formulate research and development policy.

The most visible loci of sustained concern about policy development have been the Adult Development and Aging Branch of the National Institute of Child Health and Development (NICHD), created in 1963, and the Administration on Aging, created by the Older Americans Act of 1965. Since their creation, however, these two agencies have been hampered by very modest budgets in comparison to the magnitude of their tasks. The Federal commitment to R and D in aging is about one-tenth of the average research development expenditures for government programs generally. To complicate the matter further, NICHD (the principle source of support for behavioral and social scientific research on aging) has approved applications in aging at a rate consistently below applications in other areas. In 1968 the NICHD approval rate for research on aging was 39 percent as compared with 49 percent for the National Institutes of Health; and in 1969 the rate was 43 percent in contrast to 52 percent. Moreover, only about 8 percent of total NICHD research funds are allocated to aging. The general picture which emerges is that research and development in aging has a relatively low priority within NICHD, within the National Institutes of Health, and within the Federal Government generally.

The scarcity of funds for behavioral and social scientific research reduces the probability of rapid advancement of knowledge. But worse, evidence indicating that research on aging has low priority further reduces the attractiveness of the field for potential investigations. In the face of these limitations one might agree that advancement in behavioral and social scientific knowledge of aging during the past decade illustrated in the previous section are greater than one might expect. Yet, the prospect of major advances in behavioral and social scientific knowledge about aging and the aged and effective application of such knowledge seems improbable at current levels of investment in research.

The need for an explicit R and D policy on aging is imperative. At a minimum, careful allocation of scarce resources is necessary. At best, a convincing case for additional research support will be made in the interest of developing efficient and effective systems of social services and of increasing not just added years of life but added disability-free years of life.

B. IMPEDIMENTS TO MAKING RELIABLE KNOWLEDGE AVAILABLE

At the present time available behavioral and social scientific knowledge about aging and the aged is not always being effectively and rapidly synthesized, evaluated, and applied. Attempts to synthesize a growing quantity of information from a wide variety of sources has been sporadic. A decade separated the publication of major inventories of behavioral and social scientific information about aging. This is the case in spite of the efforts of NICHD, the Administration on Aging, and the Gerontological Society to summarize available information in a form useful to both research investigators and the consumers of their findings. There are too few full-time research investigators in aging to avoid an information overload. Replicative research is uncommon; so is research which follows systematically and in depth the implications of theories which might organize a number of discrete research findings. Issues posed by alternative explanations of data have remained unresolved.

We are, for example, a long way from being able to specify the relative importance of the factors which insure successful aging or, more modestly, which increase the probability that old age will be tolerable. We also lack experience in converting what is known about aging and aged into appropriate social policies which can be implemented with predictable effect. Enough is known about the behavioral and social scientific aspects of aging to raise the expectation that available information should be useful in formulating and implementing policies designed to reduce some of the problems of the aged. Persistent failures to relate the available information to policy formation and implementation has inevitably led to questions about the reliability and utility of behavioral and social scientific knowledge. Greater confidence in the reliability of behavioral and social scientific data can be expected as basic findings are replicated with increasing frequency and as they are found useful in policy formation and program development.

Concise summaries of reliable behavioral and social science data on aging and the aged alone will not insure the effective utilization of scientific information. At least two troublesome factors would remain. First, attempts to apply and evaluate the impact of programs suggested by research findings continues to be hampered by professional attitudes which devalue applied vis-a-vis basic research and identify basic but not applied research with universities. With the possible exception of economists and psychologists, most social scientists with higher degrees seek and find employment in the universities. In the typical case they are minimally involved directly in the development of public policy and resist requests to provide instant information perceived to be immediately relevant to those who determine policy. In effect, the consumers of knowledge are usually quite distinct and separate from the producers and communication between them is irregular at best. Testimony to this is the constant complaint from producers of knowledge that they do not know what the consumers want; conversely, the consumers complain that they do not get the help needed. Although this problem persists, a growing impatience with this unsatisfactory situation is apparent both inside and outside the universities.

Second, knowledge is costly and consumers of information always have to decide whether the costs are warranted. The makers and implementers of policy on aging have not shown enthusiasm for major investment in behavioral and social scientific research. Apparently the cost of not having reliable information is perceived to be less than the cost of securing such information. In the long run this judgment is probably incorrect. But, in the short run, justification of costs involved in securing knowledge is required. The costs of behavioral and social scientific research are not solely monetary.

Scientific facts may be and are occasionally used to challenge existing societal arrangements and commitments. Research on many problems of aged persons suggests, for instance, that these problems are in large part predictable outcomes of our cultural values and social institutions. Problems associated with retirement from the work force are cases in point. We reward current achievement and productivity; the work experience of the old is valued only if that experience is perceived to be currently applicable. But rapid technological change threatens to make all skills fully or partially obsolete over time. To demonstrate that older

people have the capacity to be productive cannot be particularly useful if the economy does not value and bid for the services of older workers who are considered, as Joseph Spengler has observed, to be infra-average performers who must be paid super-average wages according to various governmental and trade union regulations (Busse and Pfeiffer, 1960). If the lack of an adequate national full-employment policy forces a choice in the allocation of available jobs between the younger and older worker, one expects that the younger worker will have an advantage in our society. Therefore, when medical or biological researchers discuss possible increases in life expectancy for those in the later years which might double the proportion of older people in the population, it should be clear that such a development would complicate economic problems and, as a consequence, produce a profound and probably unwelcome challenge to our existing social structure.

Behavioral and social scientific research cannot, in the final analysis, determine what societal policies ought to be developed in regard to retirement or other issues. Research can, however, provide answers about the consequences of various policies, including political consequences, and the consequences of attempts to implement them. In the final analysis, policy determination is a political act which reflects effective advocacy as much as evidence. One of the difficulties in evaluating applications of knowledge about aging in the interest of improving the welfare of older people is that such applications require as much knowledge of the structure and distribution of political power as knowledge of aging *per se*.

C. THE NEED TO ESTABLISH RESEARCH AND DEVELOPMENT PRIORITIES

Systematic review of the achievements of research in aging makes it possible not only to assess the current state of available knowledge but also to consider the relative importance of the unanswered questions. The Russell Sage Foundation inventory of research on aging and society predictably highlights important gaps in our knowledge. One of the most obvious gaps in current knowledge involves possible changes in the proportion of older people in the population and the implications of these changes. In the face of our demonstrated difficulty as a society in maintaining an adequate income in the retirement years, in providing suitable housing, and in securing adequate medical care and other social services at tolerable cost for the elderly, we have no reason to be complacent about the possibility, however remote, of significant changes in life expectancy in the late years. A lowered birth rate alone could increase the proportion of older persons by one-half in the next 50 years; significant changes in mortality, particularly in regard to cardiovascular-renal disease, could more than double the absolute number as well as the proportion of older persons. The possibility of increased demands on already over-extended social services must be anticipated. Yet the disabled old and the impoverished aged do not exhaust the problems warranting attention.

An increasingly large number of individuals reach the retirement years fully capable of functioning in a wider range of social roles than currently exist. Appropriately, the status report on applied social gerontology (Gerontological Society, 1969) stresses that the development of increased flexibility in role playing by the elderly and an increase in opportunities for the exploration of these new roles should have very high priority in future R and D efforts. The capacity of older persons for increased flexibility in role playing is well established. Experimentation with new social opportunities for the old which will encourage and utilize this potential must receive high priority.

In summary, research and development on aging and the aged in this past decade have produced solid achievements upon which to build in this decade. Potential achievements have been limited, however, by the absence of an explicit science policy giving high priority to R and D in aging. Potential achievements have also been limited by public and professional attitudes which have reduced the perceived value of both basic and applied gerontological research. Consensus about priorities in research and development efforts in aging however, is developing. The issues with highest priority include income maintenance; potential change in age structure and its implications for the provision of social services; and the development and utilization of role flexibility in the later years. Although the priority of specific issues will

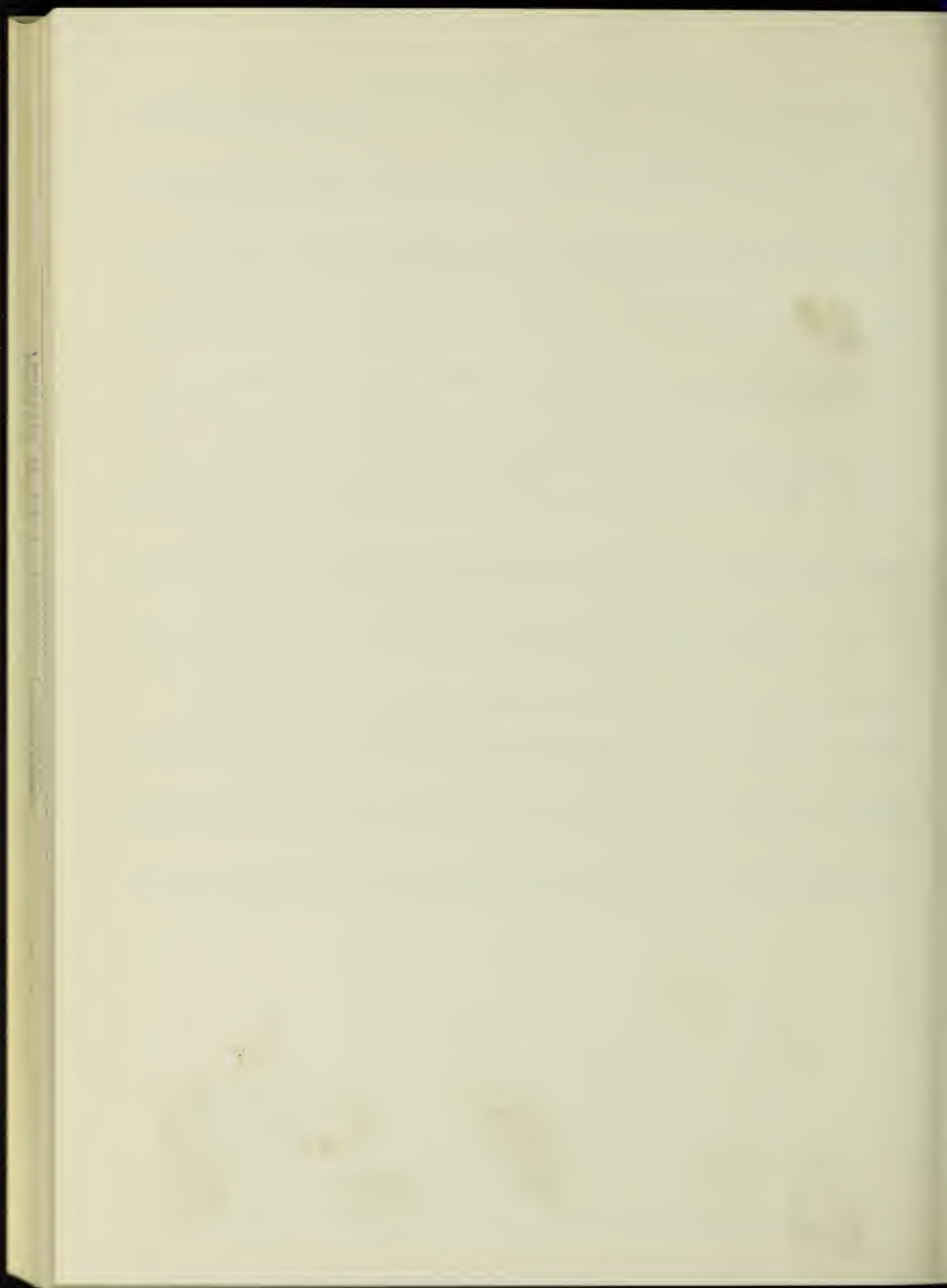
continue to be argued, the need for focusing R and D efforts on particular issues systematically and in depth is increasingly recognized.

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PART TWO: BIOLOGICAL AND MEDICAL RESEARCH

1. INTRODUCTION—THE NEED

Aging is a biological process affecting every individual. It underlies most of the costs of medical care today. Yet this aging process that goes on during the entire life span is probably the most poorly understood of all biological processes.

A healthy 30 year-old adult who becomes a healthy 60 year-old adult is still a changed individual. All the body systems have been altered by aging, which leave the individual more susceptible to disease—to the very chronic diseases upon which this nation has focused attention in an attempt to abort or lessen their impact. Eighty percent of people in the United States over age 65 have one or more serious diseases. However, we know very little about aging itself: the process that leads to the accumulation of chronic degenerative diseases in the elderly.

There are many examples of aging processes occurring throughout adult life. These processes are progressive, but they do not produce symptoms or obvious effects until old age is reached. In the cardiovascular system, age changes in large arteries—coupled with other age-linked metabolic risk factors—lead to arteriosclerosis, which is progressive from early adulthood and results eventually in heart attacks, strokes, and loss of limbs. Thinning bones throughout adulthood in everyone leads to frank osteoporosis and frequent fractures in many of our elderly. Progressive age changes in the cartilage around our joints lead to degenerative arthritis. Age-linked changes in sugar and fat metabolism produce a progressive increase in the incidence of diabetes and gallstones as adulthood advances. Changes in our immunological defense mechanisms related to aging lead to reduced ability to retard and reject cancer growth, often resulting in destruction of the body's own tissues. These are just a few examples of the interrelation between aging and disease.

One major unsolved biomedical mystery facing us today is the understanding of these aging processes. It is not only an academic problem, it is an immensely practical one. For a variety of reasons, the challenge of the aging problem has not spontaneously attracted the attention of large numbers of outstanding biomedical researchers in the way, for example, that immunology and molecular biology have appealed.

Yet the aging process we are considering is universal. Solving its mysteries could prevent the deterioration that leads to chronic diseases and could prolong the period of vigorous and productive life without lengthening senility. If we could understand the biomedical aspects of aging, then perhaps some intervention during adult life would be possible. This intervention could decrease the prevalence of, and disability associated with, the age-related chronic diseases that are the largest medical problem in the United States today. Knowledge gained could be readily applied, such as occurred when basic research in virus replication rapidly led to the virtual eradication of poliomyelitis in the United States.

Because of the dramatic advances in biomedical research during the past two decades, the time and the scientific climate are ripe. A stimulus from the Federal Government appears to be needed to promote and advance research in this area. The investment would be small, compared to the cost of chronic disease in both human misery and dollars (approximately two-thirds of total health care expenses in the United States are accounted for by people over 65). The economic value of eliminating the necessity of institutionalized care for the elderly should not be underestimated.

The mechanisms of specific funding for support of biomedical research and research training in aging need to be explored.

Optimal levels of support for research in relation to goals need to be determined. Does aging research deserve to be a priority program in the present era of budget austerity and competing needs? We cannot continue to focus attention only on the end result of aging processes in man—disorders of the elderly. But how far should we also direct our efforts toward understanding the aging processes taking place through the entire adult life span? What

is the optimal quality of research we can strive toward, and how will we train the necessary biomedical research personnel in adequate numbers?

The field of biomedical research in aging is unparalleled in scope. It is a problem area requiring the skills of a wide variety of scientific disciplines. How can we foster and promote the application of these skills to aging research? The types of support also need to be analyzed, in particular with regard to laboratory research, training for laboratory research, and transfer of new knowledge from the bench to the bedside. How can information and data exchange among biological and medical scientists working in various aspects of aging research be facilitated?

These are some of the major issues which should receive attention in the development of relevant public policy.

II. LONG-RANGE GOALS

Biological and medical research in gerontology were discussed at the 1961 White House Conference on Aging. A summary statement of what was perceived to be a fundamental long-range goal indicates that:

...medical research is not merely interested in prolonging life; it is more concerned with increasing and maintaining the functioning efficiency of the mind and body of the aged person. To restate this aim, medical science hopes to reduce or prevent changes associated with aging and eliminate diseases which reduce the person's power to think, feel, perceive, and respond.

The Conference also made major recommendations for biological and medical research. These recommendations were partly policy and partly programmatic in nature. The principal recommendations were (U.S. Senate Special Committee on Aging, 1961):

- (1) Establishment of a National Institute of Gerontology within the existing framework of the National Institutes of Health (NIH) to study the basic biological changes underlying the aging process and all health-related aspects of the aging problem.
- (2) Expansion of Federal support for large-scale multidisciplinary aging research centers and programs.
- (3) Establishment of animal colonies to maintain and supply adequate numbers of animals for use in aging research.
- (4) Stimulation of research on biological and medical aspects of aging by:
 - (4.1.) Vigorous expansion of support for individual research projects.
 - (4.2.) Long-term committed support for longitudinal studies.
 - (4.3.) Lifetime investigatorships in aging research.
 - (4.4.) Continued exploration of needs in the study of the biology of aging, accomplished by appointment of a study section on aging within the Division of Research Grants of the NIH.
 - (4.5.) Encouragement of appropriate programs of research in aging in both public and private agencies.
- (5) Granting of funds on a nonmatching basis for construction of laboratories and special animal facilities for research programs in aging.
- (6) Stimulation of training in gerontology with Federal support by:
 - (6.1.) Establishment of graduate scholarships in aging research.
 - (6.2.) Development of graduate instruction facilities in aging research.
 - (6.3.) Support for a national and international exchange of scientists through a fellowship program.
 - (6.4.) Assistance for universities and medical schools to establish academic chairs in gerontology.
- (7) Establishment of committees for research in aging within the framework of universities to promote, at the State, regional, and national levels, free exchange of information pertaining to aging research.

A wide variety of specific recommendations concerning areas in biology and medicine related to aging that require specific study were also made at the 1961 Conference.

As few of these recommendations have been implemented, however, they have had no major impact on biomedical research effort.

III. KNOWLEDGE AVAILABLE

A. BIOLOGY OF AGING

The aging of our population appears to be outrunning our basic and our therapeutic knowledge. The important unsolved questions of biological research in aging remain: Is there a fundamental (intrinsic) biological mechanism (or mechanisms) of aging, as distinct from disease? Can the effects of aging be prevented, modified, and repaired?

Today, there are no definite answers. There may be a big difference between "changes with age" and "changes due to an aging process." As yet, there is no single process which is known to determine aging. Experts agree, however, that understanding the nature of the aging process is a solvable scientific problem, but solving it requires a complex attempt to systematically decipher myriad changes.

1. "Causes" of Aging

There are a number of theories of the basic biological cause(s) of aging which parallel the growing body of basic scientific knowledge. (For example, during the last decade, remarkable progress has been made in understanding the molecular basis of the fundamental life process, inheritance.) These formative notions and hypotheses can now be subjected to systematic testing.

There appear to be discrete conceptual areas bearing on the biological nature of aging (Comfort, 1964, 1969 a). One or more of these areas may be the keys to the process:

(1) Decrease in the ability of cells to synthesize and maintain their key components.

(1.1.) DNA, the fundamental genetic molecule (the "blueprint"), may be subject to damage or change (mutation) with time, altering cell function. In other words, the blueprint may fade and become illegible.

(1.2.) RNA, messenger molecules ("the copies"), which translate and transmit information from the gene for the synthesis of protein, may be also subject to damage.

(1.3.) The cellular organelles and enzymes (the "machine tools") needed for protein synthesis may deteriorate.

(2) Progressive loss of cell function.

(2.1.) Utilization of nutrients for energy may be impaired.

(2.2.) "Promotor substances" such as hormones and growth factors may become insufficient.

(2.3.) Accumulation of undesirable intracellular and intercellular deposits such as amyloid.

(2.4.) Accumulation of effects of damage, similar to that produced by ionizing radiation via the activity of molecules known as "free radicals."

(2.5.) Changes in molecules, such as collagen (a connective tissue fiber) by "cross-linking," known to occur progressively with age, which may inhibit transfer and diffusion of nutrients.

(3) Loss of cells.

(3.1.) In tissues, such as brain and nervous tissues, in which cells multiply slowly if at all, death of cells seriously impairs function.

(3.2.) Even in rapidly renewing tissues, control and rate of cell division may be impaired.

(4) Loss of intercellular coordination.

(4.1.) Alteration of homeostasis, the check and balance system that controls most body processes.

(4.2.) Change in energy transport anywhere from the source to its utilization, involving such processes as passage through cell membranes ("permeability").

(4.3.) Decrease in cell responsiveness or the ability of cells to cope with perturbations.

(4.4.) Loss of the defense mechanism for the control of invasion by foreign materials ("immunity"). Changes also may affect the cells responsible for antibody production, or all the cells in the body, in such a way that they are recognized as foreign rather than native. The result is progressive autoimmune "civil war" and tissue damage (Nalford, 1969).

Factors involved in the aging process may be of two types: "intrinsic," which occur inevitably as a natural biological property (such as the wearing out of an engine), and "extrinsic," which are related to the environment (such as radiation, diet, infectious agents, etc).

2. Effects of Aging

Regardless of the fundamental causes of aging, its effects are predictable and more widely known. Aging produces an acceleration of death rate as time progresses, resulting in a finite life span for all species which is predictable and unyielding. The conquest of specific diseases has reduced mortality earlier in life, and allowed more people to live longer, but maximum lifespan, as opposed to life expectancy, has not been appreciably altered.

The changes due to the aging process accumulate throughout life and pave the way for the diversity of diseases that afflict the elderly. To characterize and study age changes, repeated observations must be made on the same individual as he progresses through his lifespan (the "longitudinal" method, in contradistinction to the "cross-sectional" method in which different individuals of varying ages are compared and which is thus open to selection bias). Longitudinal studies of man are expensive, difficult, and time consuming. Thus far, such studies have shown that most physiological and biochemical functions of the body gradually decline throughout adulthood, beginning in the thirties and forties. Many functions appear to be well-maintained and stable under resting conditions, but responses to perturbations and stress may be impaired. Characteristically, older individuals are less effective than young in meeting the challenges of the environment, and they require a longer time to readjust to their stable internal milieu after displacements occur. Aging does not have a uniform effect on different organ systems even in the same individual, so that differences in the rate of aging among organs (for example, the brain and the heart) may represent the source of many of the medical and sociological problems of older people. In addition, there are wide individual differences in the effects of age on the whole person. Some 80 year olds have a total functional capacity as good as that of the average person many years younger for reasons that are as yet unknown, but that should be amenable to research.

3. Experimental Approaches to Alteration of Aging

Extrinsic factors involved in aging may be more modifiable than intrinsic. Both are subjects for research. The kinds of studies that have been done thus far indicate that aging can be altered by changes in:

- (1) Diet—caloric restriction in an otherwise adequate diet in certain young animals can double lifespan, while overfeeding may shorten life by fostering specific diseases, such as arteriosclerosis.
- (2) Exposure to radiation—animals exposed to higher than normal doses of X-rays or other sources of radiation show accelerated changes similar to those of intrinsic aging.
- (3) Exposure to toxic substances—chronic effects of chemicals in food, pollutants in air and water, in some instances appear to produce changes similar to those of aging.
- (4) Administration of drugs—drugs such as those which counteract radiation effects and prevent "free-radical" formation, antioxidants, or stabilized lysosomes, experimentally increase average longevity of mice.

The mechanisms producing these effects need to be studied further. Such study is a necessary prerequisite for the development of nontoxic methods for slowing down the rate of aging in man (see below).

B. MEDICAL ASPECTS OF AGING

Intrinsic processes of aging, almost by definition, increase man's susceptibility to environmental stresses, such as accidents and diseases, (for example, pneumonia, caused by a specific etiological agent).

More important, in terms of the well-being of the elderly, the aging process in itself leads to the inevitable appearance of a variety of chronic diseases ("age-linked diseases"). The relationship between aging and disease may be so intimate that it is often impossible to decide where "normal aging" ends and disease begins. For example, glucose metabolism deteriorates with age in everyone leading to frank diabetes mellitus in many elderly people; bones become thinner throughout adulthood, frequently culminating in obvious osteoporosis, collapsed vertebrae, and fractured bones; aging of cartilage underlies osteoarthritis—a cause of great suffering among the elderly and a prominent reason for the high incidence of limitation of mobility.

Aging may be coupled with extrinsic factors and/or hereditary tendencies in the production of serious diseases. Important example of these age-linked diseases are arteriosclerosis—the hardening of the arteries that leads to heart attacks, strokes, loss of limbs, and other troubles—and cancer.

Finally, aging produces changes that are in themselves disabling, such as loss of sight and hearing. Conversely, some processes considered to be aging may be due to cumulative effects of environmental factors, such as the dry, wrinkled skin associated with prolonged exposure to sunlight.

Thus aging is intimately related to the nation's chronic disease picture (U.S. Department of Health, Education, and Welfare, 1970):

- (1) 14.6 million adults have definite heart disease, and an additional 13 million have suspected heart disease—most of these are arteriosclerotic; one million deaths occur from this cause each year; the economic toll is estimated to approach \$25 billion annually.
- (2) 2 million are known to be diabetic.
- (3) 13 million report some form of arthritis.

- (4) 1.2 million have activity-limiting visual impairment.
- (5) More than one-half million new cancer cases are diagnosed each year.
- (6) More than 70 percent of all deaths are caused by heart disease, cancer, and stroke.

Understanding of the relationships between aging processes and these diseases is crucially important if the medical profession is to have any chance of reducing the enormous burden of chronic disease and disability. Research on aging in man is therefore linked both to the study of disease and to the changes taking place throughout the entire span of the adult years, and not simply to the events of the terminal years of life.

The conquest of specific diseases (infections, etc.) affecting morbidity and mortality in the earlier phases of life has resulted in the accumulation of age-linked diseases in the adult clinical practice of most physicians. Thus research in aging undoubtedly will have a definite impact on medical practice. Since we may be entering "a phase of medicine in which the primary role of the physician is no longer curative" (Eisdorfer, 1970), research directed toward the maintenance of the highest level of functioning possible in affected individuals is needed as well.

C. THE RESEARCH FRONTIER

Many authorities agree that the underlying biological cause(s) of aging can be deciphered. After examining and assessing the current lines of thinking likely to be productive, Dr. Alex Comfort, Director of the Medical Research Council Group on Aging in London, stated at the 1969 International Congress of Gerontology that,

Biological gerontology may well be to medicine of the '70s what chemotherapy was in the '40s and '50s and immunology has become in the '60s—with even broader implications than either of these for the future of mankind. I firmly believe that if we really apply ourselves, in a relatively short time and at relatively small cost (by the standards of other technological programs), we could present man with the option of realizing one of his oldest fantasies: control of his lifespan. At the very least, we could determine whether a measure of control is possible . . . if a major scientific power were to devote enough resources to this problem, within 10 or 15 years we could answer the questions (Comfort, 1969a).

The possibility of such control has been surrounded by a series of popular myths, denials, delusions, and rationalizations which have obstructed research in the past. At a 1970 interdisciplinary conference in Santa Barbara, sponsored by the Center for the Study of Democratic Institutions, gerontologists discussed the long-range medical, psychological, and social implications of a substantial increase in human longevity. They concluded that man, although he does not have the potential for physical immortality, could significantly control his life span in the near future in such a way as to give him many more years of healthy middle life.

It appears likely that the medical consequences of aging can be prevented with further research. At the Santa Barbara Life-Span Conference, Dr. Leroy Duncan, Chief of the Adult Development and Aging Branch of the National Institute of Child Health and Human Development, indicated that slowing down intrinsic aging processes probably would greatly delay the onset of chronic diseases such as atherosclerosis, cancer, and osteoarthritis. "We may well be unable to launch a truly effective attack on many chronic diseases until we have control over intrinsic aging process" (Duncan, 1970). Delay in the onset of chronic diseases would defer functional decline. People would retain the physical and mental faculties of

middle age well into old age. On the other hand, "cure" of a leading cause of death in later years, such as cancer or arteriosclerosis, would have remarkably little effect on overall life expectancy—estimated at barely five years for the elimination of both causes. Old people would die a little later of something else (Comfort, 1969b).

As a prerequisite for any experimental attempt to alter the rate of aging man, it is necessary to be able to measure that rate. Only recently, attempts have been made to measure aging physiologically, as opposed to chronologically, mainly through the use of data obtained from longitudinal studies in which the same individuals are examined repeatedly over a period of years. Until now, most of the knowledge about changes with age has accrued from cross-sectional studies in which individuals from different age groups are examined at the same time, thus introducing the major difficulty that persons from different ages have different chronological backgrounds (changes in nutrition, medical care, etc.). If however, human aging rates can only be measured in 70 to 80 year experiments, then attempts to modify the clock must be confined to shorter-lived species. Test batteries to measure aging rate in man over a much shorter term are now being developed (Comfort, 1969b), making it possible and practical to transfer much nonhazardous fundamental research on the slowing of age changes from animals to man, using age-related variables other than mortality.

The possibilities for altering the aging rate of man are manifold, and many agents or other types of intervention are ready to be tested. We have evolved from preoccupation with the ancient dream of a youth restorative to the threshold of discovery of practical means of retarding the effects of time. Research on the nature of aging has led to the following types of possibilities for study in man:

(1) Drugs—a hypothetical ideal nontoxic drug theoretically would: maintain fidelity of translation of the genetic code from DNA to RNA and from RNA to protein, and maintain normal levels of protein synthesis in the brain and other tissues. It would also prevent damage from free radicals and from harmful cross-linking of molecules, and support resistance to infection and cancer. Obviously, no one drug fulfills all these goals; however, several types of agents are available which could affect some of these detrimental age-changes.

(1.1.) Antioxidants—these "chemical scavengers" which prevent free radical action have extended the lifespan of mice as much as 40 percent and are presently used in some foods to retard spoilage. The natural antioxidant, Vitamin E, is also available.

(1.2.) Immunosuppressive agents—suppression of autoimmunity presupposes adequate protection against infection and proliferation of malignant cells.

(1.3.) Anti-radiation drugs—offer promise for protection against tissue injury by undesirable free radicals.

(1.4.) High energy compounds—increasing concentrations of high energy compounds such as ATP, creatine phosphate, and cyclic AMP in tissue may increase energy reserves.

(1.5.) Popular drugs—although fashionable outside of the United States variety of drugs are in use which have never been tested systematically to show that they retard aging. Their use is presently on purely hypothetical grounds.

(2) Diets—low calorie, nutritionally adequate diets, which uniformly have retarded true aging in animals remain to be systematically tested in primates or man. At the least, the prevalent age-linked disease arteriosclerosis may be curtailed as a result of such studies.

(3) Hyperbaric oxygen—recent evidence suggests that impairment of thought processes in senile individuals can be reversed temporarily by providing more oxygen to the brain.

(4) Genetic intervention—any maneuver in this area must take into account profound social consequences. It is possible however at this time to begin to consider experimental alterations in the genetic program, as they might affect aging. It should be possible to modify the loss of specific protein synthetic capacities of cells by appropriate drugs in the same way, for example, that antibiotics are used to control gene expression in bacteria without detrimental effect on the function of the host organism's cells. These drugs are not yet available, but on the horizon. Although at present a clear experimental lead might be difficult to test or apply in man, much thought is currently being given to the form and criteria for human studies.

IV. THE PRESENT SITUATION

A. GOALS OF PUBLIC PROGRAMS

1. National Institutes of Health (NIH)

The importance of aging processes for the well-being of all individuals and the recognition that aging processes are a part of human development led Congress in 1962, when it created the National Institute of Child Health and Human Development (NICHD), to charge that institute with the responsibility for forwarding research in the biological, psychological, medical, and social aspects of aging. NICHD established its Adult Development and Aging Branch to support research and research training on all aspects of aging. Thus this branch is the Federal unit responsible for the support of research and research training in biological, psychological, medical, and social aspects of aging through grants and contracts to qualified investigators. The NICHD also maintains an intramural research program (Gerontology Research Center) specifically oriented toward biomedical research on aging.

2. Other Public Programs

2.1. Administration on Aging, Department of Health, Education, and Welfare.

The Older Americans Act (1965), while providing for social research on problems of aging, does not include biomedical research as part of its mission. Since the NIH has a mandate for the support of biomedical research, there was an agreement between the Director of the Adult Development and Aging Branch of the NICHD and the Commissioner of the Administration on Aging (AOA) that the NICHD would support biomedical research and that AoA would support social research.

2.2. Veterans Administration (VA).

Medical research is part of the basic mission of the Department of Medicine and Surgery. To meet its responsibilities to the increasing number of aging and older patients, the VA has encouraged basic and clinical research programs in aging on a broad front.

2.3. The Atomic Energy Commission.

The Atomic Energy Commission has a specific responsibility to understand the long-range effects of ionizing radiation in man. One of these can be termed "accelerated aging," in that appreciable irradiation in man and animals is followed by tissue changes similar to those associated with normal chronologic aging. Thus, it is important to the Commission to understand the natural aging processes in order to evaluate those induced by radiation and to attempt to relate the degree of shortening of lifespan per unit of radiation dose. It would be a goal of the Commission to find ways to modify or prevent such tissue changes and to avoid shortening of lifespan.

2.4. Other Public Agencies.

Although several other public agencies (see IV. B. Existing Programs . . .) offer some specific types of support, none has support of biomedical research in aging as part of its goal.

The small fraction (less than 1 percent) of the cost of health programs for the elderly devoted to research in aging is considered by many experts to be woefully inadequate to meet the need. By contrast, in many fields, from 3 to 5 percent of the total expenditure is devoted to research.

B. EXISTING PROGRAMS OF SUPPORT FOR BIOMEDICAL RESEARCH IN AGING

1. Public Programs

Government programs of research on biomedical aspects of aging are defined for purposes of this survey as programs in which the research is intentionally focused on aging processes as such rather than on disease processes. Research in disease is included in this assessment only when the emphasis is on the fact that the subjects are aging or aged, or that the disease interrelates with aging processes. While most of the research on disease currently conducted will be of some value to the elderly, it will not be included in this review.

There are five Government programs that feel a responsibility for biomedical research on aging and that support programs in this area.

1.1. National Institutes of Health (NIH).

The NIH, with its broad mandate for medical research, conducts and supports through its institutes much research on biomedical processes and diseases relevant to the health of persons in all age groups. Research specifically oriented towards biomedical aspects of aging is conducted and supported by the NICHD, which has an extramural program, administered by the Adult Development and Aging Branch, and its own intramural, interdisciplinary program at the Gerontology Research Center located in Baltimore in a newly completed research building. The intramural research is done by NICHD scientists, the extramural by scientists at research institutions, universities, and medical schools across the country via grants and contracts. The NICHD also has an Adult Development and Aging Information Center administered by the Scientific Information Centers Branch. An advisory body, the National Advisory Child Health and Human Development Council, is the consultant group responsible for policy recommendations and final approval of grants.

The various types of extramural support include research projects, training projects, special and postdoctoral fellowships, career development awards, and contracts. Last year (fiscal year 1970), with an expenditure of approximately 5.5 million dollars, 62 research projects in aging were supported, of which seven were large multidisciplinary projects involving a number of investigators and designated program projects. Of the applications reviewed during the fiscal year 1970, the majority were in the biomedical aspect of aging. Training grants are awarded to stimulate and increase opportunities for advanced training for individuals interested in research careers in aging. There were 27 training grants supported involving 211 students, seven direct fellowships, and seven research career development awards. However less than one-third of these grants were in the area of biomedical research training. Several contracts to support ancillary research activities were also awarded. An advisory committee is responsible for initial review of program project research grants, training grants, and research career development awards in the field of aging, and conducts the final review on fellowships. Of the applications reviewed during the fiscal year 1970, 44 percent were recommended for approval, and 17 percent of these were funded.

The budgetary outlook for aging research (biomedical *and* behavioral) supported by NICHD in fiscal year 1971 has been estimated as follows:

<u>Extramural</u>	
Research grants	\$3,043,000
Fellowships	191,000
Training grants	<u>1,895,000</u>
Subtotal	5,129,000
 <u>Intramural</u>	 2,055,000
Staff support	<u>325,000</u>
Subtotal	2,380,000
 Research contracts	 <u>396,000</u>
Grand total	\$7,905,000

In recent years, the total budget for aging research represented approximately 10 percent of the research expenditures of the NICHD and less than 1 percent of the total budget of the National Institutes of Health (U.S. Senate Special Committee on Aging, 1970). These estimates do not include research directed specifically at common age-linked diseases *per se*, such as atherosclerosis, osteoporosis, arthritis, and cancer—which is supported by other institutes for different disease categories (National Heart and Lung Institute, National Institute of Arthritis and Metabolic Diseases, and the National Cancer Institute).

1.2. Veterans Administration (VA).

Because of the large and growing number of elderly patients in VA hospitals, the Veterans Administration has a strong interest in research in aging. A wide variety of biomedical aging studies is being carried out within the research project support program for investigators throughout the hospitals in the VA system (U.S. House of Representatives, 1970). These range from fundamental studies on the mechanisms of aging to clinical studies of age changes in man in a normative longitudinal study of a large healthy male population.

The patient population of the VA reflects the increased utilization of hospitals and clinics by the expanding number of individuals who live beyond the sixth and seventh decades. Although in 1970 the average age of all veterans was 44.4 years, the average age of the *veteran-patient* in VA and non-VA hospitals was 54.0 years. Thus, a major concern of VA medical authorities is the care and treatment of the older veteran. Predicated on the fiscal year average inpatient day cost for general hospital care of \$49.22, diseases of aging, where the principal diagnosis was arteriosclerotic heart disease, stroke, chronic bronchitis, or emphysema, resulted in VA inpatient care costs of approximately \$97 million during 1969 as compared with a cost of approximately \$78 million during 1965.

This, then, is the challenge to, and the focus for, the VA program of research in aging: to provide the scientific advances whereby these diseases and the many others that afflict the elderly can be controlled and prevented.

The VA sponsors both basic and clinical research programs attacking the problem of the mechanisms of aging from the standpoint of current concepts of biology and medicine. The VA believes that just as fundamental research was important to broadening and strengthening our knowledge of disease processes, fundamental research is of vital importance for advancing our understanding of aging or of mechanisms bearing on the aging process.

The portion of the VA research budget that can be ascribed to aging research approximated \$3.2 million in fiscal year 1969, about 6 percent of its total research funds.

1.3. Atomic Energy Commission (AEC).

The Atomic Energy Commission funds some 24 projects investigating various phases of the aging process. Some are carried out in the National Laboratories, some under university auspices. The major effort is directed toward identifying the ways in which ionizing radiation modifies cell and tissues so as to result in changes simulating natural aging and whether such changes are identified with or similar to natural aging processes.

The researchers of the Atomic Bomb Casualty Commission are heavily engaged in evaluating aging in a large control population in order to identify changes possibly induced by exposure to the radiation from the two weapon bursts in this population. Similarly, a large fraction of approximately 4500 beagle dogs at 5 major projects are being studied intensively as normal aging controls for other animals being irradiated continuously by varying amounts of a variety of internally deposited radioactive isotopes. These controls are producing highly useful data on aging processes in the beagles.

Other studies being carried out at the cellular tissue level suggest that the immune capacity of the body decreases as the immunogenic cells age and that life shortening may be tied to deterioration of this system. Other investigations aimed at identifying natural aging vis-a-vis radiation exposure are concerned with functions such as spermatogenesis in the dog, thyroid hormone production, synthesis of cerebral lipids, morphological stability versus dysgenesis of cells and tissue culture, etc.

The estimated expenditures for aging research by the AEC was \$5.6 million in FY 1969 (U.S. Senate Special Committee on Aging, 1970).

1.4. National Institute of Mental Health (NIMH).

This institute supports research on mental health aspects of aging analogous to that supported by the NICHD, a topic covered by the Background Paper on "Mental Health." Estimated expenditures for mental health research were \$2.2 million in fiscal year 1969 (U.S. Senate Special Committee on Aging, 1970).

1.5. Health Services and Mental Health Administration (HSMHA).

This agency supports research grants to evaluate the quality of medical care to the elderly.

1.6. Other Public Agencies.

Other Government agencies occasionally support a research project that can be categorized as biomedical aging research. For example, the Federal Aviation Administration supports a longitudinal study of air traffic controllers, and the Air Force operates a longitudinal study of flight personnel. The National Science Foundation may support some projects relevant to aging. Thus the total annual Federal expenditure for biomedical aging research in fiscal year 1969 can be roughly approximated at \$15-20 million.

2. Private Programs

There are several private organizations and foundations that are involved in research on aging. None provide direct financial support for biomedical research studies.

2.1. Gerontological Society.

The broad purposes of this society are to advance the scientific study of aging and to promote human welfare by the encouragement of gerontology in all its areas. To accomplish these ends the society aims to provide aging research in biological, social, and clinical sciences;

to stimulate communications among scientific disciplines; to expand education in aging; to foster application of research to practice; to advance utilization of research in the development of public policy; and to develop the qualifications of gerontologists by setting high professional standards. The society sponsors an annual national scientific meeting and publishes gerontology research studies in two journals—the *Journal of Gerontology* and *The Gerontologist*.

2.2 American Geriatrics Society (AGS).

This society is devoted to all aspects of health care of the elderly. It sponsors an annual national meeting and publishes scientific reports in its monthly journal. It has established the AGS Research Foundation to solicit funds to further research and teaching in the field of geriatrics.

2.3. Association for the Advancement of Aging Research.

The purpose of this recently founded organization is to facilitate expansion of research on the fundamental origins and complex expressions of the aging process. It aims to pinpoint existing needs and opportunities, to evaluate the scope and deficiencies of present research efforts, and to formulate long-range proposals and the means of fulfilling them.

2.4. American Aging Organization.

This is a voluntary lay and scientific group presently being organized along the lines of similar groups, such as the American Heart Association, with a national core and State affiliates. Its purposes will be to promote biomedical aging studies directed toward slowing down the aging process(es), keep the public informed of the progress of aging research, and increase knowledge of gerontology among physicians and other members of the health team.

2.5. Lay Groups.

Interested laymen have also devoted much time and effort to promote aging research on a less formal basis.

In addition there are private foundations that do directly support disease-oriented research efforts. Clearly, many of these studies on the common age-linked diseases have important implications relevant to biomedical aspects of aging. The major foundations so engaged include:

2.6. American Heart Association.

Statement of Mission: "To support research, education and community service programs with the objective of reducing death and disability from heart and blood vessel diseases; to coordinate the efforts of physicians, nurses, social workers and others engaged in the fight against heart and circulatory disease." The amount spent for research annually is approximately \$14 million (\$6 million by the national office and about \$8 million by the other chapters). This research is supported in nonprofit institutions, mainly medical centers of universities and hospitals.

2.7. Arthritis Foundation (Formerly the Arthritis and Rheumatism Foundation).

Statement of Mission: "To foster and finance research for better methods of treatment and toward discovering the causes and cures for arthritis and the rheumatic diseases; to increase and improve treatment facilities and training." Approximately \$9 million was spent in

support of research last year through grants and fellowships to individuals in clinical research centers or medical schools.

2.8. American Cancer Society.

Statement of Mission: "To support education and research in cancer prevention, diagnosis, detection, and treatment, and provide service to cancer patients." During fiscal year 1969 approximately \$205 million was spent in support of research, mostly in medical schools.

2.9. American Diabetes Association.

Statement of Mission: "To promote among physicians and others the free exchange of knowledge with respect to diabetes mellitus; to improve standards of treatment; to promote medical research by individuals, hospitals, clinics, universities, and other institutions." During 1969 only \$137,000 was spent in support of research. The organization of this association is in a state of change from a professional society to a voluntary health agency. While it therefore presently has a modest research program, this is expected to increase when public fund raising activities are started.

3. Adequacies and Deficiencies of Existing Programs.

As part of its overall review and critical examination of programs affecting the elderly, the President's Task Force on the Aging (1970) recognized the longstanding lack of coordination among all Federal programs. As its first priority, it recommended the establishment of an Office on Aging within the Executive Office of the President to plan, develop, coordinate, and evaluate all Federal activities related to aging, which presumably would include biomedical research.

Within the structure of the NIH, with much effort, different areas of research support are distributed among the various categorical institutes. Obviously, much of NIH research is of some importance to the elderly, since it deals with diseases that they may have or contract. In addition, since aging processes contribute to many of these diseases, as shown in Section III. Knowledge Available, many different Institutes may support research that touches on aging processes. The NICHD program of research support in aging has evolved in a way that attempts to avoid unreasonable overlaps with other Institutes, and yet not leave unfortunate gaps. Thus, under the present setup, a working approach would be that the NICHD should encourage and support a strong program in the basic biology of aging. No other Government agency has this responsibility, and if it is not encouraged by support from NICHD it will probably not be given significant Federal encouragement and support. Many other Institutes may support areas that are of interest in the basic biology of aging, but the area can be given coherent support at present only by NICHD. Such coherent support should help provide a base of information to underlie research on aging in many organ systems and in many diseases. Research should continue on the relation of aging processes to diseases. When the emphasis is on the disease entity, the support should come from disease-oriented institutes. When the emphasis is on biochemical and physiological change with age that leads to disease, the support should come from NICHD.

Recently, the House Committee on Government Operations recommended that the NIH review medical research on aging, in particular long-term studies, with regard to gaps, duplication, and balance. It was found (1968) that there was no unwarranted duplication in research on aging. By their nature, longitudinal studies involve studies of similar or identical functions; however, since different populations are involved, this is desirable. Unfortunately, methods used are often not identical, which makes comparison hard. Such studies are difficult, very costly, and because long periods of time are involved, produce problems of continuity. These studies require extremely careful planning and coordination, and periodic review and exchange of information.

What became apparent from a thorough collation of all Federally supported biomedical research efforts in aging was the inadequacy of the effort. It was found that research on all medical aspects of aging is underdeveloped and undersupported. A similar conclusion was reached by the President's Task Force (1970): "Two indications of the extent to which the aging, the aged and the process of aging are not valued in American life are the dearth of basic and applied gerontological research and the acute shortages of trained . . . manpower." It was specifically recommended that additional Federal research and training monies be made available for research support in the basic sciences and in applied gerontology. The Task Force also noted the need for funds for development and expansion of centers on aging at major universities, and the need to establish methods for translating and validating research findings into useful programs of service and support for older persons.

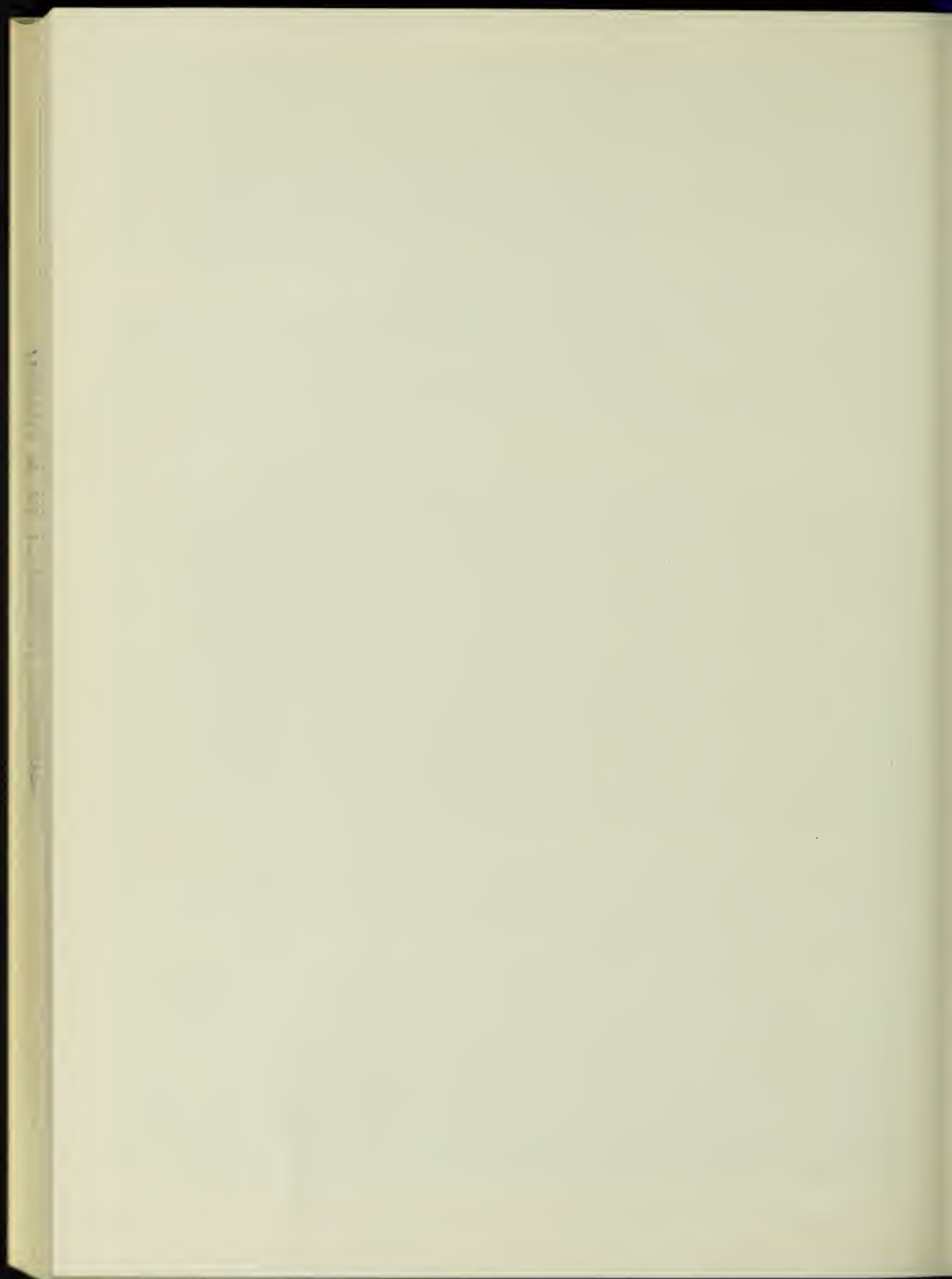
Knowledgeable individuals have also deplored the serious underfunding of biomedical aging research. It has been asserted (Strehler, 1970) that the small amount spent in the United States (about 8 cents per person per year) to uncover the sources of aging and to determine what can be done about it constitutes "a scandal of neglect." Comfort (1969a) has questioned what we could possibly do to face the problem of clinical trial in man, if tomorrow a drug were to be described that would double the lifespan of mice and was otherwise harmless. Clearly, we have allocated neither the resources nor the mechanism to deal with such a possibility.

The present mechanisms of funding, coupled with the drastic shortage of funds, has led to serious problems. The Adult Development and Aging Branch of the NICHD must compete with other important NICHD programs, such as neonatal biology, for its share for aging research (less than 10 percent). The miniscule support level has affected not only extramural research throughout the country, but the intramural Gerontology Research Center as well. At present there are less than 120 staff members at the newly completed facility that will accommodate 300. The productivity of this center during the past 30 years leaves little doubt as to its value, but operation at optimal efficiency has not been possible.

There are also problems in competing for support through the established NIH system of grant awards via peer group review which has been eminently successful in other research areas. Research in many biomedical aspects of aging is still at the descriptive stage and often is given lower priority than highly-focused research which has reached the stage of hypothesis-testing. Thus, in recent years research grants in aging have had only one-half to two-thirds the chance of being approved as grants in other areas. The problem is compounded by the possibilities that, indeed, in many instances the caliber of the proposal is weaker, and that the review bodies of eminent scientists are typically not familiar with the area of aging. Both observations reflect the shortage of outstanding scientists who have been attracted to research in aging.

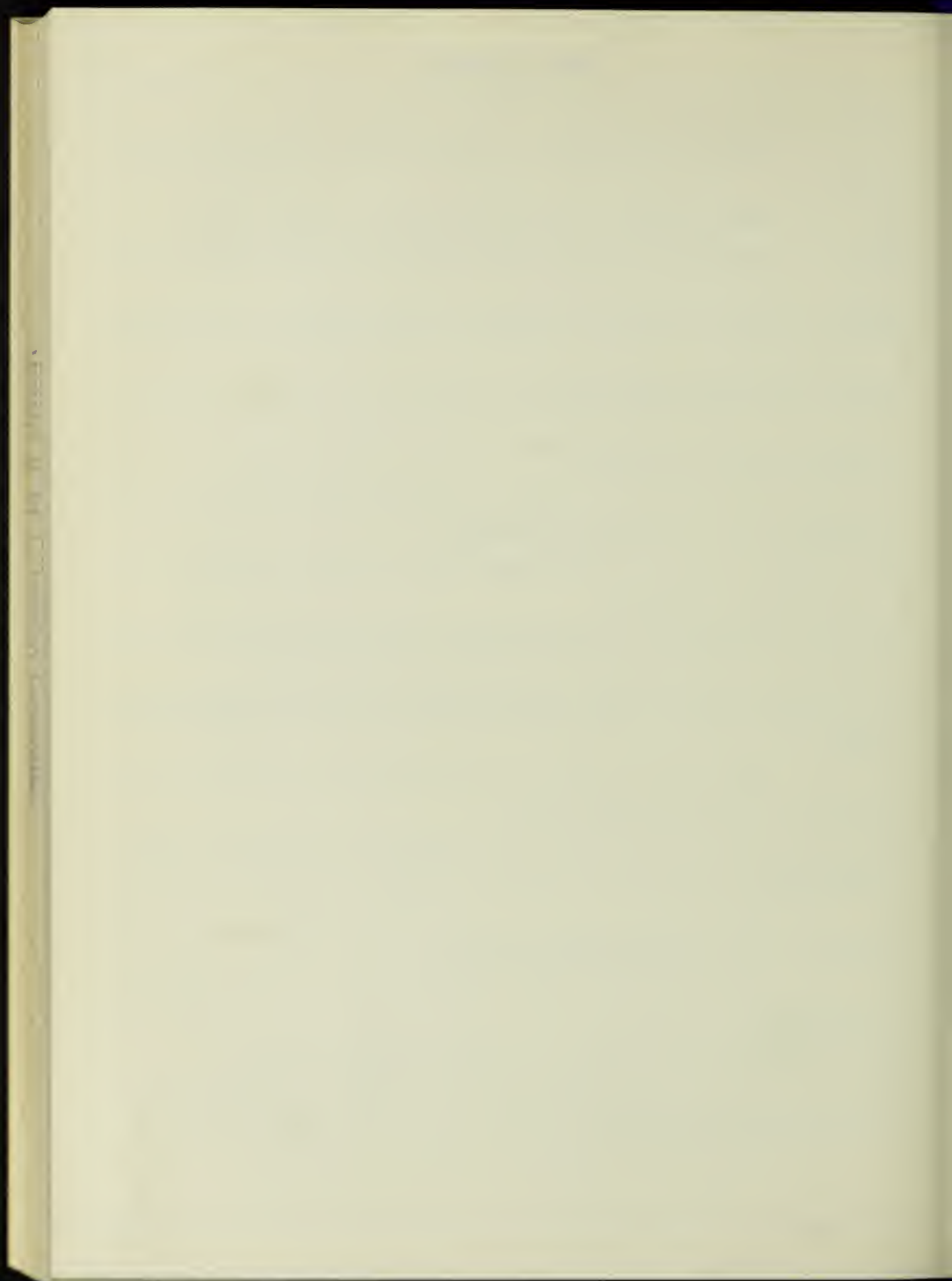
The problem of complexity of biomedical research in aging, because of the different kinds of talent and skills needed to sensibly attack this phenomenon, requires interdisciplinary efforts. The Gerontology Research Center and the several interdisciplinary units supported by the NIH at universities are examples of one approach to the problem. But the total support for these programs is small and inadequate.

Government agencies supporting research on aging need to coordinate their programs, and individual investigators and teams conducting research on aging need to coordinate their efforts. The problem of communication and exchange of information among scientists working in various disciplines in aging has been partially attacked by the Adult Development and Aging Information Center of the NICHD which has published experimental issues of abstracts in the field—representing screening of 300,000 articles in 3,200 journals in 1969—to aid investigators in keeping abreast of developments in aging research. Expansion of this coverage is desirable. In addition, every government agency with a program of biomedical research on aging will store its abstracts with this center for periodic collating, analysis, and distribution. Expansion of periodic symposia and conferences among investigators in the field is necessary and critical for appraisal and coordination of research efforts.



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PART THREE: ISSUES

The foregoing background papers on Behavioral and Social Research and on Biological and Medical Research have dealt with several aspects relative to the accumulation of knowledge about the processes of aging, the characteristics and circumstances of older people, and the environmental factors that influence their circumstances and behavior. The authors of the papers—representing research interests in the field—have shown that our knowledge of aging is growing, but they also raise the question as to whether such knowledge is increasing as rapidly as it is needed. They point out that the older population could be relieved of a great deal of physical and mental illness if more were known about the conditions that afflict them and that environments and opportunities for older people could be improved and enhanced if we had more knowledge and promoted its utilization. The Technical Committee for Research and Demonstration suggests that the Federal Government and the nation should take a stance with reference to what priority should be given to research on aging, the most important foci for gerontological research, and where responsibility for promoting and conducting research should lie. Several questions relative to the development of a stance or national policy are raised in the issues set forth below.

Issue 1.

Should total Federal funds for research be increased to give higher priority to research on aging? Or, should increased support for research in aging be obtained by diverting funds from other areas?

One position is that research on aging has had low priority and that this has led to unfortunate consequences. Proponents of this point of view state that resources for research on problems of great importance for older persons have been scarce and thinly spread. At a time when life expectancy is increasing, needed research on how to maintain the quality of life in the later years remains undone. We need to know a great deal more than we do, not only about how to maintain health and income in the later years but also about how to develop attractive social roles for the elderly, how to develop efficient and effective systems of social services, and how to create a system of transportation which can be used by persons of *all* ages.

We need systematic attempts to apply *available* knowledge. Demonstrations of how to convert knowledge into practice are frequently unsystematic and do not provide models for widespread application.

We also need new knowledge. It is not enough, for example, to know that the institutionalization of elderly mentally ill persons infrequently leads to rehabilitation; we must know and demonstrate effective alternatives.

Scarce and thinly spread resources for research on aging and the aged have attracted few scientists who have devoted their skills to problems of great importance to older people. The Gerontological Society, the principal professional organization for behavioral and social scientists interested in research on aging, has less than two hundred Fellows (senior investigators) and fewer than fifteen hundred members in social scientific sections. It is almost certain that if more research funds were available, more researchers would be attracted to the field.

The need for additional investment in research on aging and the aged is clear. What other problems in our society are as important or more important than those of the 10 percent of citizens who are 65 years of age or older? A specific review of our current investment in research on important social problems in our society is necessary and timely.

The issue is whether the Federal Government should appropriate more money for research on aging or whether some of the monies devoted to research in other areas should be reallocated to research on aging instead?

Issue 2.

Should all public funds expended for older people be spent for facilities and services? Or, should some proportion—as in most government agencies and private enterprise—be used for research and evaluation? If research and evaluation should be supported, what proportion of the overall funds should be used for these purposes?

Another way of obtaining more funds for research in aging would be to earmark for research some of the money now spent for facilities, programs, and services for older people.

Students of aging and many of those who have responsibility for health and social planning for the older population take the position that the development of facilities, programs, and services should be based on detailed knowledge of older people and their needs and on sound information as to the best ways in which their needs can be met. It is frequently stated that the nation is spending large sums of money on behalf of older people without knowing whether the programs being supported are effective and efficient and satisfying to older people. It is argued, further, that when funds are scarce the need for information for sound planning is increased.

Past and present expenditures for research in aging have been and are insufficient to provide the knowledge that health, economic, and social planners believe to be necessary. The authors of the background papers point out that many government agencies and private business spend from 2 to 5 percent of their available funds for research. In the field of aging about two-tenths of one percent of the total expenditures are devoted to research. Thus, the question may be asked: does it make sense to put large amounts of public and private funds into facilities and services for older people without assurance that they are meeting the needs they are intended to meet?

Another point of view—perhaps inevitable when funds are scarce—is that facilities, programs, and services for the older population are in such limited supply that all of the funds that can be made available should be spent for these purposes. There are some people who would insist that we have enough information now to enable us to do much better than we are doing in the provision of health and rehabilitation services, nutrition, long-term care, retirement housing, protective services, opportunities for voluntary service and other meaningful activities, and the whole gamut of things believed to be essential. The nation could go a long way in meeting the needs of the older population with the knowledge now available. Two questions are: (1) Is the information now available sufficient to enable us to do as well for older people as we should be doing? (2) What would be the consequences of proceeding solely on the basis of what we now know until the needed facilities, programs, and services are available to all older people?

If it is recommended that a full or partial moratorium be declared on research and evaluation, the last question in the issue statement is irrelevant. If, on the other hand, investment in research is recommended, an important question is: what should be the ratio of funds devoted to research to funds for facilities and services?

Issue 3.

Are current fragmented activities of the Federal Government in research on aging and its utilization in policy and program development satisfactory? Or, should a local or focal point be created within the Federal Government for giving direction to and coordinating its effort on aging research and translating such research into programs?

At present, a dozen or more Federal departments and agencies share responsibility for the Federal Government's programs on behalf of the older population. Most of these agencies

conduct programs, channel funds to State and local agencies and to voluntary organizations, and conduct research to provide themselves with the information required for planning and evaluating their activities. These include the Veterans Administration, the Department of Health, Education, and Welfare, the Department of Labor, the Department of Housing and Urban Development, the Department of Agriculture, the Department of Defense, the Department of Transportation, the Treasury Department, the Office of Economic Opportunity, the Atomic Energy Commission, and the National Science Foundation. A natural consequence of this dispersion of responsibility is that there is a good deal of fragmented effort, relatively little attempt to achieve coordination, and probably a quite considerable amount of overlap if not of duplication.

A question that has concerned many officials within the Federal Government, including the Congress, and many persons outside of the Government is whether or not there should be a mechanism for coordinating and giving direction to the activities of the several agencies involved. Proponents of coordination take the position that special focus should be given to older people as a major element of the population and that a rounded and consistent approach should be taken to meeting their needs. Some would go so far as to suggest that all Federal activity in aging should be brought under the control of a single agency or department.

Proponents of the other view hold that programs and services for older people should be the province of functional agencies concerned with particular areas such as housing, income maintenance, health, employment, and social welfare. They argue that problems of older people are not unlike most of those of persons of all ages and that they can be dealt with best by agencies that have specialized knowledge and responsibility within particular functional or program areas.

The issue is: are the present structure and program responsibilities within the Federal Government adequate to serve the needs of older people, or would some different structure and assignment of responsibility be more effective?

Issue 4.

Should a National Institute of Gerontology be established for research in the biomedical and social-behavioral aspects of aging? Or, should the conduct and support of such research remain dispersed as it is now?

An issue closely parallel to Issue 3 is raised regarding the responsibility for research activities of the Federal Government in the field of aging. It was noted in the discussion of Issue 3 that most of the departments and agencies with programs for older people conduct their research to guide their own policy and program planning and to evaluate their efforts. Several of the departments—among them, Health, Education, and Welfare, Labor, Housing and Urban Development, Veterans Administration, Defense, Transportation, and Agriculture—make grants and contracts with universities and other research agencies outside of the Government. Thus, there is fragmentation of the Government's gerontological research effort and research grants programs as well as of program responsibility.

A question raised frequently is whether these research efforts and grant programs should remain fragmented, or should there be some way of coordinating them? One common suggestion is the creation of a National Institute of Gerontology to bring research activities within a single agency. Various suggestions have been made in previous national conferences on aging and in other places. These have included proposals for—

A National Institute of Gerontology or National Center for Research on Aging, independent of existing Federal departments and agencies.

A National Center for Research on Aging as a branch of the Administration on Aging.

An Institute of Gerontology within the framework of the National Institutes of Health.

A Center for Research on Aging within the National Institute of Child Health and Human Development.

Proponents of these proposals urge that there is need for increased visibility—not only for research but for the entire field of aging. They argue that the creation of such a facility would probably lead to greater funding for gerontological research and that such a manifestation of government interest would lead more students and research workers to commit themselves to careers in gerontology. They also point out that efficiency calls for more coordination and the elimination of possible duplication of effort.

Opponents of the proposals cited above tend to insist that research on aging is an inevitable aspect of research in other areas (such as chronic illness or growth and development) and that it should not be separated. Similarly, agencies responsible for programs in service to the older population can be expected to argue that they must have their own research for program planning and evaluation.

Another approach might take the form of a central agency, committee, or council established in or by the Executive Office of the President for the purpose of giving direction to and coordinating Federal research in aging. Past experience would probably dictate, however, that this type of mechanism has little effectiveness.

Issue 5.

Should the Federal Government continue to support research and training programs in separate departments or schools within universities and research agencies? Or, should the government foster the development of multidisciplinary or independent centers for research, training, and provision of technical assistance in aging?

Traditionally, Federal funding agencies have made research grants to single, established departments or schools within universities and to nonuniversity research agencies. Thus, most of the support has been used for research within specialized fields such as anatomy, biochemistry, psychology, sociology, or social work. Research workers within these and other fields have made significant contributions to the knowledge of aging within their fields of specialization. Some researchers take the position that it is only through research in depth within relatively narrow fields that significant knowledge about aging can be produced.

Others take the position that the complexities and wide-ranging processes of aging and of the factors that influence the behavior of older people require that some research be conducted by teams of investigators representing several fields of specialization. This, in turn, has led to the suggestion that universities should be encouraged to establish multidisciplinary research programs or even multidisciplinary units or centers for gerontological research. One of the advantages, it is argued, that would accrue from the establishment of such centers is that a wider range of investigators would be recruited for research in aging than has been the case when grants are made to single investigators for research within their own fields.

Proponents of the creation of centers urge that they should have the additional functions of training research, teaching, and professional service personnel for the field of aging. Also, that their staff members would be well equipped to provide guidance and technical assistance to persons responsible for developing, and providing facilities, programs, and services for older people. Such assistance might take the form of (1) showing how research findings can be utilized, (2) evaluating the effectiveness of programs and services, and (3) offering in-service training for personnel working with older people. Also, it has been suggested that some such centers might be established separately from universities.

The issue, then, is whether extramural support for research on aging should continue to be channeled almost exclusively to investigators working within particular fields of specialization or whether some support should be used for the establishment of multidisciplinary—perhaps regionally distributed—centers for research, teaching, and technical assistance?

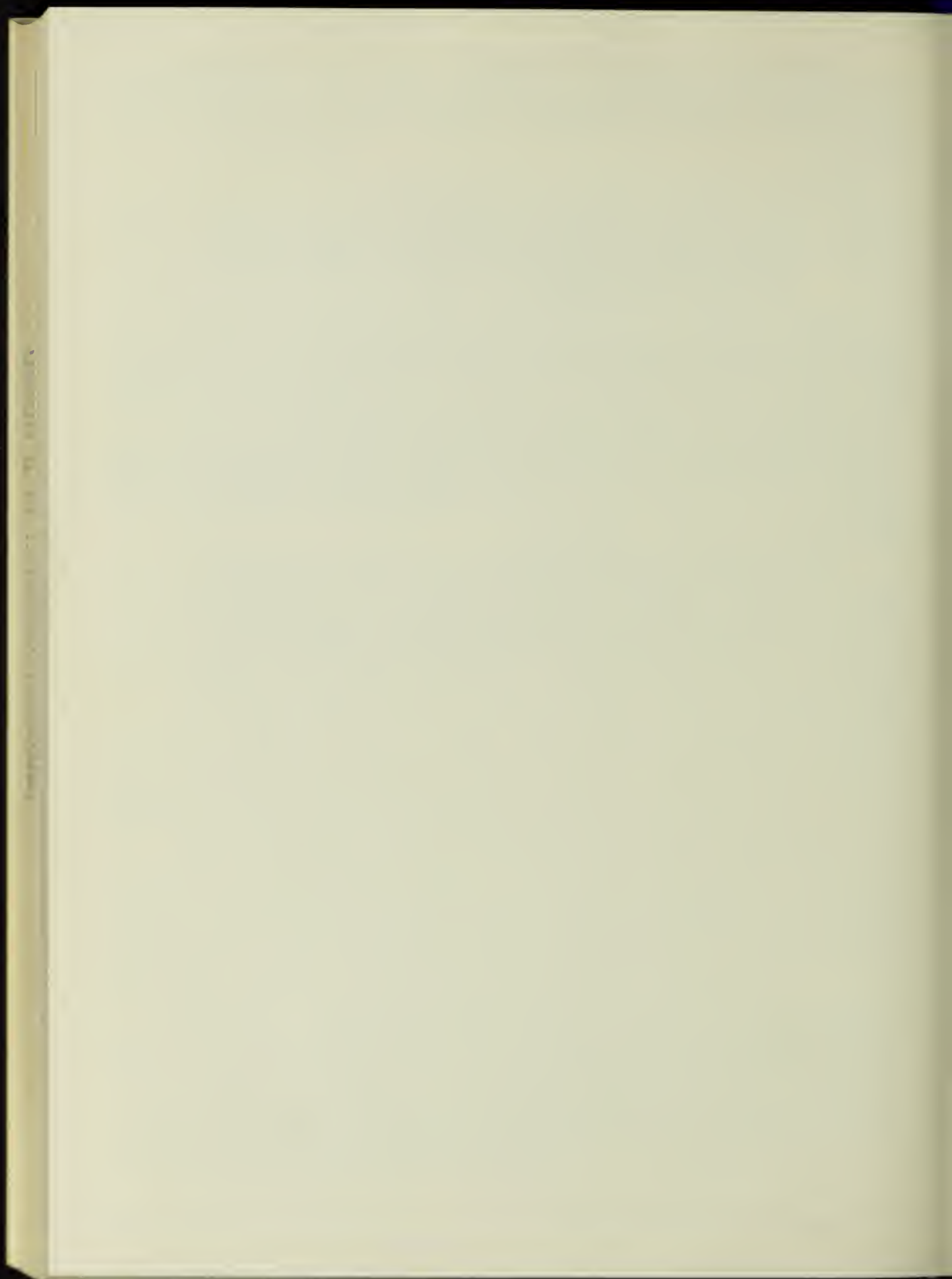
Issue 6.

Should the major research focus be directed toward improving the quality of life in later maturity and old age? Or, should the major portion of the funds be devoted to understanding the basic causes and ultimate control of aging?

Research on aging has been directed toward: (1) understanding the basic processes of aging and (2) identifying conditions and circumstances the control of which could lead to healthier and more satisfying living in the later years. Understanding of the basic processes of aging might lead to the prolongation of life as well as to control of some of the chronic diseases that lead to disabling illness and physical and mental deterioration.

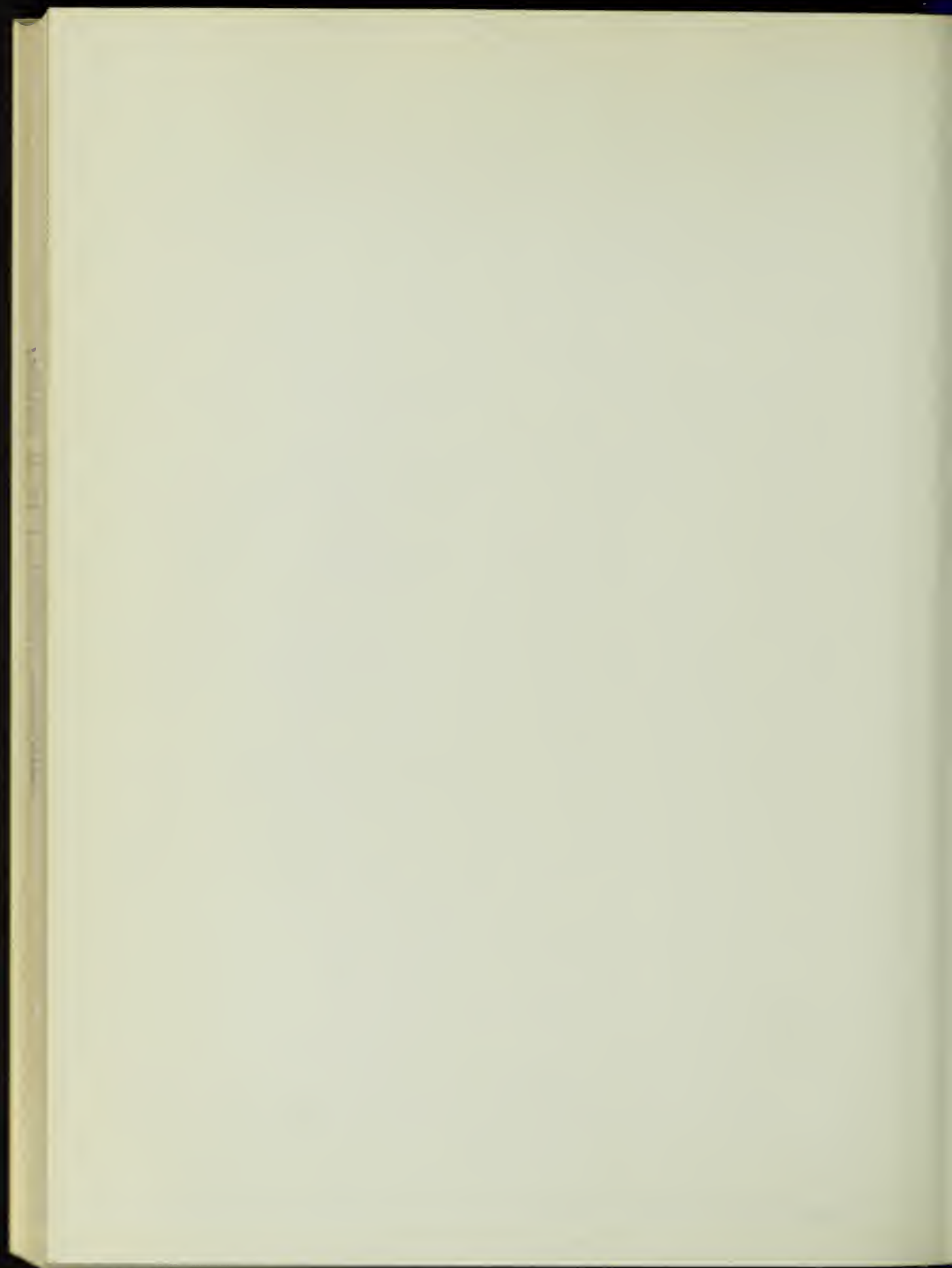
Some people are intrigued with the possibility of *extending the span of life* through control of the aging process itself and would like to see research on aging focused in this direction. If such an effort were successful, the number and proportion of older people in the population would be greatly increased. But such a result would not necessarily reduce and might prolong the period of handicapping illness, enfeeblement, and financial and social dependency experienced by many older persons.

Other specialists in the field of aging and many older people themselves would probably support a policy directing the bulk of research funds into *improving the quality of life* in old age. They urge that it is more important to direct the research effort toward such matters as the elimination of poverty among older people, prolonging the period of competent mental and social functioning, improving the quality of life in long-term care facilities, making transportation services readily available, and affording freedom from the diseases of old age.



TECHNICAL COMMITTEES AND BACKGROUND PAPERS

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